Horticultural Society

# MASSACHUSETTS PLOUGHMAN

DEVOTED TO AGRICULTURE, HORTICULTURE, THE FARM, THE GARDEN, THE FIRESIDE, RURAL LIFE, LITERATURE, USEFUL ARTS, NEWS, &c.

AND NEW ENGLAND AGRICULTURE.

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## Editorial.

### FARMERS' CLUBS.

The Secretaries of Farmers' Clubs have less than a week more in which to make their returns according to law to the Secretary of the State Board of Agriculture. November is the time specified and that rough month is rapidly gliding away. Probably the Secretaries of many Clubs have forgotten this duty and will neglect it till it is too late, and if so it will be in order for some member of the Club to remind them of it. A Club that complies with the law will be furnished with the reports much sooner than one that does not. Those that comply will of course be served first, and a Report is worth much more to a farmer in March, when he has time to read it, than it is in April or May when he is busy.

### DIGESTION IN ANIMALS.

From the mouth, the food passes through a tube to the stomach. It would seem in the human species to pass through this by the mere force of gravity. But if you regard the animal kingdom in general, you will perceive that this cannot be the case, as the stomach is often higher than the mouth; this happens to grazing animals, as the horse, cow, etc. Its passage is not therefore governed by the mechanical laws. The tube in fact is composed of muscles, which successfully contract on the food and carry it along. The power of this tube is different in different animals. In some birds it is quite feeble, so that they are obliged to hold up their heads when they drink, in order to get the mechanical power of gravitation to assist it.

The most remarkable point about this tube is its susceptibility of distension. This takes place in a remarkable degree in the serpent tribes. Probably many readers have seen our common striped snakes employed in swallowing frogs, of a diameter, apparently greater than that of their own bodies. In the narrative of Lord Amherst's embassy to China, there is an account of the great boa snake and the process of swallowing a goat with large expanding horns. So the shark swallows a large man.

The stomach is a hollow cavity or organ, in which the food taken in, after mastication, is dissolved and decomposed, so as to be rendered fit for the nourishment of the system. It follows of course that the very definition of an animal implies something of this sort, and in fact it must be common to all animals. This organ then is the foundation of all others, which are added to it in various ways, so as to constitute different kinds of animals. Some of the simplest as the polypi are very little else, being mere purses, which receive the food of the animal, while on the other hand, the more complicated, as man, have a vast variety of additional organs.

In the first place, it may be remarked that the construction and powers of the stomach are more or less simple in different animals. It is more simple in animals that live upon flesh than in those which use vegetable food, for the former substances being already animal, require less complicated processes to assimilate it to the support of animals, and the more distant the food is from the composition of animals, the more complicated or powerful is the stomach; thus in animals which feed upon grass and hay, it is far more so than in merely carnivorous ones.

The stomach again need not have so much power where the teeth are more complete. Thus in man where the latter are so perfect, the former is more feeble, a circumstance to which mankind in general do not pay sufficient attention. Never do with your stomach what you can do with your teeth, is an old proverb, and an important one. It is founded on experience and confirmed by physiology. On the other hand, in birds, which have no teeth, there are several stomachs, one in particular, which is lined with a hard cartilage, or gristle, and is so powerful as to break glass and stones.

When we find a set of animals which eat such food as is very unlike the composition of their bodies, and at the same time wanting a considerable number of the teeth, we may expect to find the stomach complicated. This is the case with ruminating animals; they eat grass and want the upper fore teeth, and they have accordingly four different stomachs. This formidable digestive apparatus we may mention in passing, belongs also to some or the grasshopper tribes, who have four stomachs, a fact that some of our New England farmers would have no difficulty in believing of those who made such havoc among their grain during the past summer.

The operations performed upon the food before its arrival in the stomach of an animal are obviously of a mechanical kind, as we have seen above. Here, however, it is to take its first step in the progress of vitality. What happens to it here? What in fact is the nature of digestion? Philosophers have answered this question in various ways. Some say it is a trituration, or grinding of the food into a uniform mass. Now this sort of trituration undoubtedly takes place in some animals, as in birds, but it does not in all. Besides in birds, it is only a preparatory measure which supplies the want of mastication. Others have supposed it to be a species of fermentation, which was only changing the name without explaining it.

Others have called it *solution*, and so it certainly is, but there is something besides mere solution. This, however, is one of the first steps in the process, and is effected by means of a fluid called the gastric liquor, or juice.

This is a colorless fluid without much taste or smell, or indeed, any very remarkable sensible quality. Still however, its solvent powers are prodigious. It dissolves every kind of vegetable and animal substance, and even the hardest bones are easily dissolved by the gastric fluid of such animals, as the dog, wolf, hyena and eagle.

But besides the solution there is also a combination, forming a third substance with change of properties, an effect which may be made most intelligible by an illustration taken from another science, that of chemistry.

## Questions & Answers.

### HOLDING UP MILK.

*Editor Massachusetts Ploughman:*

I have a cow that lately has got in the habit of holding up her milk when about two-thirds done, thereby not only diminishing the quantity for the time being, but seems to be drying herself up.

Will some one please inform me through the *Ploughman* how to prevent this holding up, and oblige a constant reader?

Respectfully yours, G. M.

We have usually found that feeding some palatable food at the time of milking induces a greater willingness to give down the milk. We know of no way of compelling a cow to give down and it must be done by a course of persuasion. Has any reader of the *Ploughman* anything better to suggest? If so let us hear about it.—[ED.

### MEADOW MUD.

*Editor Massachusetts Ploughman:*

Is meadow mud worth the cost of digging, carting, etc. It has been used extensively in this vicinity, and it was supposed to have valuable properties, and I have used it till my upland is all turning to meadow, at least meadow grass has come up and is growing most all over the land, and I have doubts of its value. Others as well as myself, would like to hear through the *Ploughman*, from those more experienced. V. E. W.

*Littleton, Nov.* 15, 1876.

As a general rule we doubt if it pays to dig and apply common meadow mud until it is properly cured or "weathered," as it is called. It is useful as an absorbent, to a certain extent, under the barn or in the compost heap. It prevents the drainage or running away of the liquids under the stable, and acts as a purifier, but we think for this use it is worth more after it has lain sometime exposed to the weather. If applied directly in a crude or raw state, it cannot act immediately as a fertilizer. It may do injury on some soils, by bringing in sorrel and other sour, or acid plants.

On light sandy soils well rotted muck is often useful in increasing their retentive power, so as to make common manures last longer and produce greater effects than they otherwise would. They improve the mechanical condition of such soils, if they do not add any element of fertility. But mud or muck differs greatly in quality. Some kinds are far better than others. Some may be worth their cost while others are comparatively worthless.—[ED.

### SUDDEN DEATH OF FOWLS.

*Editor Massachusetts Ploughman:*

I would like to be informed through the *Ploughman* of the cause of my hens dying. They are healthy one day and the next day they are dead, they die with full crops; they die very suddenly before I can detect that anything ails them. They are well cared for, as I do all that is in my power for them. If any one knows of any remedy I would like to be informed through the *Ploughman* as soon as possible, and oblige A SUBSCRIBER.

Apoplexy is probably the cause of the fowls' death. They have no doubt been overfed and their viscera will be found to be covered with fat. Keep them on low feed, oats, etc., and give them no corn, or but very little at best.

Drive them out and give them all the exercise possible, and see that they have an abundance of pure water and green feed.—[ED.

### THE FARMER'S VETERINARY ADVISER.

*Editor Massachusetts Ploughman:*

The inquiry in the *Ploughman* of Nov. 18th for the "*best book on Cattle Diseases,*" has led me to make a careful examination of the Veterinary Adviser, to see if we had a book we could freely recommend. Heretofore I had only consulted it as occasion had demanded. This work, by Prof. James Law of Cornell University, gives in a condensed form, the plainest account of the diseases of our domestic animals, with treatment rational and of easy application. Here we find an intelligible account of all the modern contagious diseases, some of which happily have not yet reached our shores.

Dr. Law, to fit him for the preparation of this volume, unites the advantages of a thorough veterinary education in Europe, and extensive practice in this country. These rare opportunities he has improved to give us a work well fitted for the American farmer, and the existence of such a book only needs to be known that it may be appreciated and adopted.

A few titles are given to show what may be found in its pages. Pleuro-pneumonia—Hog Cholera—Texan Fever—Milk Fever—Foul in the Foot—Skin Diseases—Parasites, &c., all arranged so as to be easily found, and with such plain descriptions as can be understood by the unprofesional reader.

T. S. GOLD.

*West Cornwall, Conn., Nov.* 17, 1876.

### CEMENT FOR CRACKED HOOFS.

Mr. Defay has discovered a preparation by means of which sand cracks or fractures in hoof or horn may be durably cemented up. Even pieces of iron can be securely joined together by its means. The only precaution necessary for its successful application is the careful removal of all grease by spirits of salammonia, sulphide of carbon, or ether. Mr. Defay makes no secret of its composition, which is as follows: Take one part of coarsely-powdered gum-ammoniacum and two parts of gutta-percha, in pieces the size of a hazel-nut. Put them in a tin-lined vessel over a slow fire, and stir constantly until thoroughly mixed. Before the thick, resinous mass gets cold, mold it into sticks like sealing-wax. The cement will keep for years, and, when required for use, it is only necessary to cut off a sufficient quantity and remelt it immediately before application.—*English Live Stock Journal.*

### AGRICULTURE OF WORCESTER COUNTY.

The opening address of Mr. O. B. Hadwen, Chairman of the Committee of Arrangements of the Farmers' Institute held at Worcester last week, presents a good general account of the agricultural interests of Worcester County, and especially of the immediate vicinity of Worcester. After calling the meeting to order he spoke as follows:

*Gentlemen of the Board of Agriculture:*

In behalf of the Committee of Arrangements, and in conformity with a custom which has grown into favor with these meetings it becomes my duty, as their Chairman, to call this assembly to order. I do this with the greater pleasure as I am thus able personally as well as officially to welcome you, gentlemen, to the Heart of the Commonwealth, the centre of agricultural interests second to none in variety and importance within the limits of your official supervision. I welcome you to the goodly city of Worcester, where almost every industry thrives upon a patronage not limited by State or National boundaries, and I welcome you to Horticultural Hall, the headquarters in this city of one of the interests you have especially in keeping. The time and place would inspire almost any other than myself with words corresponding with the surroundings and the occasion. I would I had the gift upon which inspiration moves and through which it makes itself interestingly manifest; then gentlemen, the embarrassing duties of my position here, would lose themselves in the pleasure with which I should address you in welcome. I esteem it fortunate for the agriculture and the horticulture of our county that the Board meets at Worcester, and in this our Horticultural Hall. Gathered as you are from every portion of the State, your discussions will spread abroad useful knowledge coupled with descriptive experience, both tending to develop those agricultural resources of the State and county which are so essential to the happiness and prosperity of both. I need not remind you of the benign influence such gatherings exert in promoting "the most healthful, the most useful and the most honorable employment of man."

FARMING OF TO-DAY.

Worcester county, lying in the central portion of the State, travelling its entire width, compares favorably in respect to its fertility of soil with any county in the Commonwealth. The farming mostly pursued here is what is commonly called "mixed farming," the dairy being the most prominent and leading interest. All the cereals, fruits, roots, and grasses that this latitude favors thrive here. In many towns a high course of farming is pursued and lands are worked to produce profitable crops.

We have been favored for a long series of years with men who have devoted their lives to the progress of agricultural pursuits, and their example and influence have led many to take an interest and obtain a living by agriculture, and when we see so large a portion of our people devoted to this interest, in all its legitimate phases, when we recognize the fundamental truth that the ground which we cultivate is the primary source of all wealth, and more than this, when we remember that without its annual products of grains and roots and fruits, and vegetables, for the use of man, and the herbage and grasses from which our stock gather their sustenance, all other interests would be paralyzed, we can at once realize the importance of agriculture in relation to all other industries in the country. Among the most noticeable and cheering phases of advancement among our farmers that forcibly strike the eye of the observer, is the marked improvement in the grounds and dwellings. Happily the era is fast passing away, in which farmers, either rich or poor, in any section of our county, deem it incompatible with their interests, and with the dignity of their vocation, to live in homes deficient in comforts or embellishments such as the age now demands. Grounds about their buildings are receiving more care and attention, and are frequently embellished with trees and shrubs and flowers, indicative of a growing taste and a love for beautiful things. Great improvements are taking place in our methods of farming; fruit culture is receiving increased attention; and the general management of farms is continually presenting evidence of general economy and thrift. Our farmers have not been slow in introducing upon their farms the improved machines and implements of husbandry; the best and purest seeds are eagerly sought for, and the best live stock is slowly but surely taking the place of inferior. Several organizations in this county have contributed to these results and I believe I shall be justified in passing them briefly in review.

THE WORCESTER AGRICULTURAL SOCIETY,

The oldest and for many years the only agricultural society in the county, was incorporated Feb. 23, 1818, having for its object the promotion of agriculture within the county. The first exhibition took place in the month of October, 1819, on the Common in front of this building, and their annual cattle shows have regularly continued with one or two exceptions to the present time. Their exhibitions have been attended with all the advantages, and probably more than could have been anticipated at its incorporation. By its long continued influence in bringing to its annual fair the best stock and products, and by the liberal premiums offered and paid for every breed of cattle, and farm and garden product deemed worthy of encouragement, it has accomplished untold good. It has thereby facilitated the introduction as well as the breeding of the most desirable foreign and native breeds, and has enabled the prudent and sagacious farmer to infuse into his horses, cattle, sheep, swine, and poultry the best blood of the world. There is, however, still room for improvement in this department of our farming, and the next quarter of a century will undoubtedly develop increased interests and more beneficial results. The discoveries in the science of breeding domestic animals, which is now in its infancy, will improve and Americanize our live stock, giving us such as are especially adapted to our wants and climate as well as such as will please the eye of an educated fancy.

The society has about twenty-four acres of land about one-half mile west of Main street, on which is included a one-half mile track and spacious buildings for the accommodation of its annual exhibitions. Five other agricultural societies, daughters I may say of this society, with similar organizations and under the patronage of the State, occupy points within our county at the north, east, south and west of us. While most of the prominent towns have their local societies and annual shows of cattle, farm and dairy products, fruits, flowers and manufactures. Their influence has been manifest and permanent.

THE WORCESTER COUNTY HORTICULTURAL SOCIETY,

by whose liberty we now occupy their hall, was organized in 1840 and incorporated March 3, 1842. You will indulge me in a brief allusion to the history of the society. In the year 1840, several gentlemen, desirous of forming an association for encouraging the culture of fruits and flowers, and exciting a higher interest in the growth of all the products of the field, the orchard, and the garden, and to disseminate and spread abroad useful knowledge and the results of experience and observation tending to improve and encourage horticulture, made their first organization by choosing as the late Dr. John Green president, with the late Dr. Samuel Woodward and the Hon. Stephen Salisbury, vice-presidents, and ten trustees.

The society held its first exhibition on the 13th, 14th and 15th of October, 1840. The exhibition comprised little else than a meagre and confused collection of apples and pears, of which only a few were designated correctly by name, a very few quite ordinary vegetables, with some fruits and flowers contributed by gentlemen residing in the vicinity of Boston.

The late George Jaques, while president of the society, in his address before the society on the occasion of awarding the premiums offered by the society in September, 1863, spoke as follows in relation to the early period of the society's work in contrast with the results of the fair in which he was speaking. "It is now twenty-three years since the preliminary steps were taken toward the formation of this society. Those who remember the condition of horticulture in Central Massachusetts then, in 1840, contrasted with [illegible] will hardly accuse me of extravagance in asserting that the progress which we have made in less than a quarter of a century, is greater and of more value than all that horticultural science and industry had previously accomplished here since the wolf and savage prowled over the grounds where all this profusion of beauty around you was grown." When we reflect that for the period since 1863 to the present time the society's exhibitions have been regularly progressive, when we reflect upon what has been accomplished by the introduction of new fruits, many having their origin in this county, that have won the admiration of horticulturists wherever grown, we surely have cause for greater encouragement, and may hope for still greater acquisitions through the influence of this society,—a society which the father of this board, the Hon. Marshall P. Wilder, has from this platform declared to be the second horticultural society in the world in point of wealth and influence. Elaborate and instructive reports emanating from the accomplished pen of the secretary of the society have appeared in the annual transactions for the past fifteen years, portraying the best means for improving the condition of the society and stimulating the cultivation of fruits and flowers most desirable, and discarding those that have proved worthless.

With the liberal bequests and contributions of many gentlemen who have been favorably disposed toward the society, this hall was erected in 1851, and since that time has been twice remodeled to accommodate the growing wants and interests of the institution, and now stands a fitting monument in remembrance of those whose bequests and exertions have successfully placed in the ownership of the society a building so substantial, valuable and convenient. The library in an adjourning room is one of the most extensive and valuable of its kind in the country, and will commend itself to gentlemen who may take the trouble to give it an examination. Every new work of known value is added to it yearly by an annual appropriation for the purpose. Mechanical science, theoretical and practical, is so closely allied to agriculture that no person can separate them. He who cultivates the soil must have implements, working tools, and very many of the products of mechanical skill and industry. He who works in iron or wood or follows other pursuits, must have the wherewithal to feed and clothe the body, the productions of the farm.

OTHER INSTITUTIONS.

So, allied in interest to our agricultural and horticultural societies we have a mechanics association in which all the trades and industries of the city and county find representation. This association owns the largest building and hall in this city; has its annual course of lectures and its occasional exhibitions which rival any local exhibition in the land, and one of the most extensive libraries in this city of libraries.

Then there is the Lyceum and Library Associations with a natural history department, and museum of curiosities, in which may be found much to instruct the inquiring farmer in the line of mineralogy, conchology, zoology and especially "bugology." He will be a poor observer if he does not recognize some friend and many enemies, in the serried ranks of this latter department. I haven't time to speak fittingly of all the points and places of interest which surround us here. But you must understand we all here have a commendable pride in the city of our homes. Why shouldn't we? You must understand that in the lifetime of the speaker this place has grown from a town of 3,500 inhabitants to a city of more than 50,000 people, having a valuation in dollars of $50,900,000, and an annual product of $20,000,000 more. You must remember all this is the result of active industry in various directions, a gushing, driving energy in every business relation. You must remember that Worcester is, and has always been, the head centre for the manufacture of agricultural implements. More practical inventions have in this line emanated from her limits than, I had almost said, all the world besides, 225 different kinds of ploughs being made by one company within the past forty years.

THE "HEART OF THE COMMONWEALTH."

Here the invention of the first planing machine made a revolution in the business of building, and the first machine for the working of leather made our large boot manufactories possible. I believe it has been said truly of our city, that if a machine or implement of any kind for any legitimate purpose under heavens is wanted, one need only to apply to a Worcester inventor and mechanic and it will be forthcoming. We do not claim that Worcester is the centre of the universe, though the sky does shut down so nicely around her, but we may claim that she is the centre from which many interests radiate, and to which many connecting interests point as to a mechanical and agricultural Mecca. All acknowledge her as the "Heart of the Commonwealth," whose pulsations are healthy and strong—whatever may have diseased the body politic or the business energy of the land. The location of the city in the midst of an agricultural and manufacturing region, with her system of railroads radiating in every direction, has undoubtedly favored the growth and prosperity. And with the growth and prosperity have come all the other advantages she enjoys. Look at the public buildings and grounds, her antiquarian and free public libraries, where any thing in the shape of ancient and modern literature is accessible to the public! The Technical Institute for education in scientific or mechanical pursuits; the Normal School, for the preparation of teachers for our common schools; her insane asylum, where the mind diseased is ministered to and restored; her mammoth manufactories for the working of iron and wood and leather and fitting material into myriad forms promotive of human energy and enjoyment.

Such in brief is the Worcester of this centennial year, the city in which you are to-day assembled. To her hospitalities we welcome you, gentlemen of the Board of Agriculture. May the purpose of your coming be accomplished in an outgoing and an ingoing ratio—that while you give us the words that shall proceed from the heart of a well developed experience, moving us to greater striving after the perfect of our ideal, you may feel the invisible and unspoken pulsations of the "Heart of the Commonwealth," by which you are surrounded moving you also to continued strivings after those things which seem to you to be higher and better.

### TO MAKE GREAT LAYING HENS.

It is claimed that there is as much advantage gained in selecting hens with prolific tendencies, from any breed, as in selecting good milkers to improve the dairy stock, and the hypothetic—perhaps established fact—is one that stands to reason. Everyone who keeps fowls is well aware that certain ones are greater egg producers than others of the flock, and the eggs of only such as these should be saved for the purpose of increase. One writer on the subject says that he is perfectly certain that the number of two hundred eggs per annum may be attained with perfect ease in a few years' time, should the object be systematically sought. It is a matter within the means of all who feel interested in it, and one that can be easily tested without any knowledge whatever as to fancy points. If the poultry flock of the farmer can be made to produce double the eggs usually obtained from a certain number of hens, the improvement will be a paying one.—*Ohio Farmer.*

### CLASSIFICATION OF HIDES.

Green hides are those which are sent in just as they come from the animal, never having been salted.

Part cured are hides that have been salted, but not long enough to be thoroughly cured.

Green salted are those that have been salted and are thoroughly cured. To cure a hide thoroughly will require from twelve to twenty days according to the thickness of the hide and the temperature of the weather. The loss of weight from the green state is from 12 to 20 per cent.

Dry flint is a thoroughly dry hide, that has not been salted.

Dry salted is a thoroughly dry hide, having been salted while green.

In green salted hides and skins, those weighing less than 8 lbs. are called deacons; 8 to 14 lbs, calf; 14 to 25 lbs, if plump, kip; but if thin and poor, they are called runners or murrians, and are sold at the price of hides; all above 25 lbs are called hides.

A green salted hide is understood to be thoroughly cured, free from salt, dirt, meat, horns, tail, bones and sinews, and before being weighed, all such substances are removed, or a proper deduction is made from the weight, and when the head skin hangs to the hide by a narrow strip, it is cut off before weighing.

All bull, stag, tainted, cut, badly scarred, grubby or murrian hides are called damaged, and go at two-thirds price, unless they are very badly damaged, when they are classed as glue stock at a much lower price.

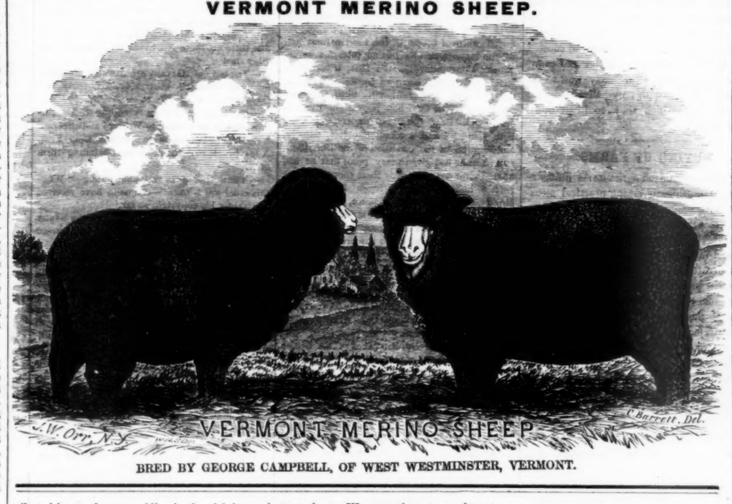
A deduction of 10 per cent. made on all branded hides.

In dry hides there are other kinds of damaged, such as moth eaten, sun-burnt or weather-beaten.

It is generally conceded by tanners and hide dealers that over one-third of the value of the hides taken off in the northwest is lost by careless skinning and curing.

As a large proportion of the hides received are green salted, the price they bring, as a rule, is made the standard for the price of all other kinds.

### VERMONT MERINO SHEEP.




BRED BY GEORGE CAMPBELL, OF WEST WESTMINSTER, VERMONT.

## Stock Department.

### THE FATTENING PROCESS.

The *Journal of Chemistry* in discussing the question from a scientific stand point, says that poor animals consists of about two thirds water while fat ones only one-half. in the total weight, and compares poor animals to bog meadows. It adds, that when the fattening process begins, water commences to disappear, and fat or suet takes its place; and the increase in bulk during the process is largely of adipose matter. It is a curious circumstance that, during fattening, the proteids, or nitrogenous compounds, increase only about seven per cent., and the bone material, or inorganic substance, only one and a half per cent.

The cost to a farmer of fattening an ox is much greater at the close of the process than at the commencement; that is, increase in bulk or dry weight at that period is much more costly. If it costs three cents a pound for bulk for the first month after a poor animal is put in the fattening stall, it will cost five cents the last month. If, then, a farmer consults his money interests, he will not carry the increase in fat beyond a certain point, provided he can turn his partially fattened animals to fair advantage. Farmers have, perhaps, learned this fact from experience and observation, and hence comparatively lean beef abounds in our markets. While this is of advantage to the farmer, it is very disadvantageous to consumers of the beef, for the flesh of a fat animal in every case is much richer in fixed, nourishing material than that of the lean, and it is never good economy to purchase lean beef. It is better to purchase the poorest part of a fat animal than the best of a lean one. The best piece of a fat ox (the loin), contains from twenty-one to twenty-eight per cent. more fixed material than the corresponding piece in a lean one, and curiously enough the worst piece in the lean animal (the neck) is the richest in nourishing material. The flesh of the neck improves very little in fattening, hence, economy considered, it is the best proportion to purchase, as its value is in a measure a fixed one.

### SOUTH AMERICAN MEAT FOR FRANCE.

About eighteen months ago, we noticed a system of refrigeration just invented in France, for the purpose of preserving meat, fish, poultry, game and other food fresh for an almost indefinite period. The system is about to be put into practical test by the Frigorifique, which, after having been blessed by the archbishop, left Rouen, August 23d, to bring home in this case 165 ons of freshly-killed meat fro m La Plata. The vessel is 189 feet long, measures 463 tons, and can bring home a cargo of 275 tons in thirty-five or forty days. She has an apparatus aft, which generates cold in five reservoirs, holding twenty-two gallons each of methylic ether. This ether vaporizes and boils at 30 deg. below zero, and is then, under steam pressure, condensed in cast-iron boxes, wherein it liquifies, in order to refrigerate afresh, and indefinitely, the cylinders of water stowed in the hold. The water subjected to this intensely cold air, containing chloride of calcium, does not freeze, but conducts the cold into reservoirs in the meat hold. The apparatus room presents a very curious aspect, through frost coating all the pipes. The supply of ether for the voyage is only 120 gallons. The temperature of the meat hold—which is 84 feet long—is so very low, as to necessitate thick clothing for those going down in it, and the immense reservoirs there, covered with frost, look like so many trees enveloped in snow. From a social and commercial point of view, the interest attached to this experiment is immense; inasmuch as while an average of forty cents per kilogramme (two pounds) is paid for meat in France, only two cents is paid in La Plata. It is estimated that in the event of a success, fresh meat from South America may be sold in Paris at ten cents per pound. Ten persons go out in the vessel to organize the service at La Plata, and purchase a large tract of ground there for herding the cattle driven in for slaughter from the interior. A refrigerating apparatus will also be constructed for stowing the meat destined for embarkation. On the Frigorifique's return, Monsieur Tellier proposes distributing portions of her cargo among the butchers of Rouen, for survey and report, and is confident that the meat will present the same appearance, and have the same flavor as that of cattle just slaughtered.—*Land and Water.*

## Horticulture.

### A PRETTY HARDY VINE.

It is interesting to note that some of the best things we have, come into extensive use almost unheralded, and people find themselves quite at home and with familiar faces, without having had any special introduction to them. They come from no one knows where, and nobody knows how their merits gained such universal recognition.

This is just how it is with a very pretty, hardy climbing plant from Japan. It seems to have both a botanical name and a common name. The common name is said to be *Fukadawraokebi*, and the botanical name Akebia. Now, as a general thing the Latin name is the "crack-jaw," thing, but just now that thing is the other thing, and for once we will leave the common name to the Japanese and will advocate a little Latin.

The leaf of the Akebia is formed of five small ones, which stand out on short stalks from the top of one larger one, like the wires from a Japanese umbrella. They are here nearly evergreen, and perhaps are quite so farther South. They do not seem to be subject to any blights or diseases, but keep good to the end of the season. The flowers come out in very early spring, are plum-colored, and of a delightful though not strong fragrance; and then there is some interest to those who are fond of peeking into floral mysteries by the fact that two kinds of flowers are borne from the same bunch. It is a capital vine for growing on light wirework, such as we often find honeysuckles put to; and then it makes a very pleasant screen for piazzas and porticos, there being enough foliage to make a screen, but yet not such great abundance as to shut out the cool air.

We are told that it has been nearly twenty years in working its way everywhere; and this, too, without any special effort to advertise it by the nursery trade.—*Germantown Telegraph.*

## The Dairy.

### IMPORTANCE OF PURE WATER FOR COWS.

In Jarrow 34 cases of typhoid fever suddenly broke out in a limited district in 20 different families, the cases being mostly confined to children. The houses, with two exceptions, were clean and well supplied with pure water. It was discovered that all the families received their milk from the same farm, which was at once visited. Six of the farmer's family were down with the fever. The water used in the dairy was from a well close to a cesspit, and evidently contaminated by soakage, as it became putrid in two days after drawing from the well. The dairy was also used as a wash-house, and the linen of the sick persons of the family was washed in it. The person who milked the cows was in constant attendance upon the sick. The nuisance was promptly detected by the health officers, and immediately abated.—*English Sanitary Record.*

*Written expressly for the Massachusetts Ploughman*

### WOMAN ON THE FARM.

#### A LADY'S TWO YEARS' EXPERIENCE ON A FARM.

For the past two years I have been a constant reader of the *Ploughman*. I have looked and hoped for some experience from a sister worker, but alas I do not find what I seek. Why is it? plenty of advise and admonition from man to man, but where are the women? I cannot believe that farmers wives have no interest in these things; why should men do all the work, read all the papers, test all the new machinery, raise all the poultry, improve the stock, leaving women the house-work only, to think of. Why is it that farmers seek neighbors barns, or a small grocery to talk over farm matters, instead of taking their papers and experience in the sitting-room with their wives and daughters? Why is it that when a man wishes to test a piece of machinery, or a pair of horses, or a yoke of oxen, he calls the men from the neighborhood, instead of his wife and family? Women! is it your fault? I fear it is. Do you take the interest in all these things you ought? do you study a horse, a pig, an ox, in fact *every thing* of interest to your husband? then complain of drudgery on a farm, no chance for *women* to improve themselves, nothing but work, all day and evening, no time for reading or writing; ah, how often we hear this complaint from women, healthy, strong and vigorous, but discontented, who see nothing but work in its broadest sense; to them a pig is merely pork, a hen a machine, a dog an ugly cur, making dirt for them to clean; a cow! ah, what woman can helping loving so lovable creature; but I fear many farmers' wives pass *her* by without a thought, say nothing of a caress. Oh woman, where is the loving nature belonging to your sex? Do not let it become caloused by the care and trouble of this rough world. Come with me, let me show you my two years of farm life; let it give thee, oh tired sister, strength and help, such as I needed and prayed for two years ago this month.

I was city reared, only had the privilege of visiting the country once a year for 27 years. I was always sick, under the physician's care two-thirds of the time; I lived for appearances; sickness and discontent was the inevitable result. Two years ago I induced my husband to take a small farm near my city home, promising to look after that, while he attended to his store in the city. Allow me to tell you how I have done it, the first thing wanted of course was a cow, which I bought and milked myself; then two pigs which I fed with my own hands, then another cow followed, with a dozen fowls. I felt I needed the work and refused to have a boy the first winter.

My husband was home in the morning until half past seven, seldom at noon, and returned about eight in the evening. Leaving me all the care and work for the first winter, I had no experience or knowledge of a farm; I merely guessed how things should be done, until I began to read and study works on farming. In the spring I was healthy and strong, weighed twenty-five pounds more than in the fall, could do my washing, which I had always hired, set my hens, raised and sold thirty dollars worth of poultry and had a nice flower garden; wed the beets, turnips, lettuce, etc., and kept things straight generally until haying time, then I worked in the field two weeks, beside doing my housework; the third week my daughter took that and I went in the field at seven in the morning and seldom left before nine in the evening.

After haying I had time to go from home on a visit and receive company, I had time to read all the papers, kept up correspondence with my friends until fall, then getting short of help again, I helped the man dig potatoes; yes, I dug eight bushels in one forenoon and picked up and assorted seventeen in the afternoon, beside doing my housework and cooking for four in the family; I also assorted ten barrels of apples; I had help in the house but three months in the two years just past. In winter I do my sewing, which leaves me free in the spring for the out-door work. In the first spring I dug and sold twelve dollars worth of dandelion greens; the second year as many, beside sewing and selling as many dollars worth of spinach. Now the question is, was I tired? ah, yes, tired indeed; but oh how sweet was my sleep; my nerves did not keep me awake at night, I needed not valerian as I once did, but health and happiness followed. Why could I do this? because I put my heart in my work, determined to be a *woman*. I made a pet of every animal on the place; if my pigs heard my voice they would cry until I went to them, as long as I talked to them they would be perfectly quiet. I learnt to love even a pig, and have always had a pet one who would follow me anywhere; yes, pigs know how to love.

My hens have names too; there is not a living creature on our farm that does not love and trust me, and for the past year we have gone into farming in earnest; we have a good stock of every thing now.

The past year has been to me the same as the first. I have time for reading, writing and loving; my windows I fill with plants in winter, making home cheerful and hearts light. Oh sick, tired, nervous women, put your heart in your work, and you will have health and happiness and time for reading, writing and visiting. Now who will follow my example and give me her experience?

MRS. S. E. T.

### LICE ON COLTS.

Lice may accumulate in great numbers before they are discovered. Sometimes they are diffused all over the skin; other times they are confined to the mane, the tail and parts adjacent. The horse is frequently rubbing himself, and often the hair falls out in large patches. There are many lotions, powders and ointments for destroying lice. Mercurial ointments, lotions of corrosive sublimate, and decoctions of tobacco, are so dangerous that they never should be used. Refuse oil or lard, rubbed on a lousy beast of any kind, immediately destroys the vermin, and there is no danger to be apprehended from this application. It merely occasions the hair being earlier in the spring, and requires a little extra attention in the housing of such animals as have been affected. Vinegar mixed with three times its bulk of water is also a good application, and not dangerous. It is most irritating, but the irritation soon subsides, and does not sicken the horse; tobacco often will. Next day the skin should be examined, and wherever there is any sign of living vermin, another application should be made. Two days afterwards the horse should be washed with soapy water, warm, and applied with a brush that will reach the skin without irritating it.—*Golden Rule.*

## FARMERS' INSTITUTE

### AT WORCESTER, MASS.,

HELD UNDER THE AUSPICES OF THE

### MASSACHUSETTS STATE BOARD OF AGRICULTURE,

**Tuesday, Wednesday and Thursday, November 14, 15 and 16, 1876.**

### TUESDAY—FIRST DAY.

The Farmers' Institute held last week at Worcester, under the auspices of the State Board of Agriculture, was very well attended and must be regarded as a success, though the discussions upon one or two of the prominent topics were cut short by sudden and unexpected adjournments. The dairy question, especially, was much less complete and satisfactory than it would have been, had it continued an hour longer, as there was abundant time to have continued it, and there were many present who wanted to hear it. We have presented the admirable opening address of Mr. Hadwen in another column. In the afternoon came on the subject of

### "FRUITS AND FRUIT CULTURE,"

**BY T. S. GOLD, ESQ.,**

*Secretary of the Connecticut State Board of Agriculture.*

The hall was nearly full, and the exercises began shortly after 2 o'clock. O. B. Hadwen called the meeting to order, and immediately introduced T. S. Gold, Esq., Secretary of the Connecticut State Board of Agriculture, who read a paper on "Fruits and Fruit Culture." He considered the subject in all its various departments, and the paper was listened to throughout with evident interest. After a brief introduction, the speaker said that fruit is too much considered as a luxury, and not as a healthful and economical article of diet. He enumerated the varieties of fruit which can be raised in our New England climate, furnishing through the whole year a healthful article of diet, which ought to be substituted as desert after meals in place of the unhealthful pastry now so commonly used. The difference in effect of well ripened fruit with that of green or wilted fruit upon the stomach was described, and choice varieties of apples and pears were intelligently discussed. Constant care and study are necessary to the successful culture of fruit, said the essayist, and farmers are too apt to neglect this. Trees that come by chance, and prove prolific bearers, are after allowed to grow, do their work and decay, without the owner taking any pains to observe the conditions that make them so successful. The speaker considered the value of apples as food for milch cows, how orchards should be treated, the varieties of apples most desirable to cultivate, naming among them the Baldwin, Westfield, Seek-no-further, Northern Spy, Hubbardston Nonesuch, Porter and others. In selecting trees for an orchard he would advise the amateur fruit culturist to have a list of desirable varieties from some excellent fruit grower, and gave some excellent directions for planting. Young orchards he considered should be cultivated for some years, but when the trees get old and strong he thought it was better to let the land remain in grass. Deep ploughing among old trees is hurtful, because it destroys surface roots and forces the trees to seek their nourishment in a cold subsoil. On the subject of pruning he said that all surplus growth should be removed, such as small shoots, water sprouts, crossing and forked limbs. This should be attended to every year; it is when an old tree which has been neglected receives a good, thorough pruning that harm is done. Bad pruning is worse than none at all. Cut the limbs closely and smoothly, but not too closely; always leave the large swelling near the main stem. The abundance of apples every other year, and the corresponding scarcity in the interval, was considered as an evil difficult to overcome. He thought orchards might be got into the habit of bearing on the odd year by picking off the blossoms on the even year and allowing them to remain the next. Fruit growing is not a haphazard business, but its success depends upon patient toil and study of the habits and wants of trees.

THE GATHERING AND PRESERVATION OF FRUIT.

He considered of great importance. Summer fruits should be allowed to ripen on the trees; but many varieties of pears may be greatly improved by ripening in the house; they should be kept cool, but not freezing cold, until time for them to ripen and then placed in a dark warm room. Apples should remain upon the trees as long as they escape from frosts. Fruit for keeping must be carefully hand picked and kept entirely free from bruises. The essayist's method is to pick his apples and place them in the barn, using baskets or bar

MASSACHUSETTS PLOUGHMAN AND NEW ENGLAND JOURNAL OF AGRICULTURE, --- BOSTON, SATURDAY, NOVEMBER 25, 1876.

something that will produce a large number of eggs and at the same time be good for the table. He spoke at some length on the "Wilbrahams," a breed of poultry that had been kept on one farm for forty years by one member of the board; they are excellent breeders and egg producers.

## "THE COLORADO BEETLE."

BY A. S. PACKARD, Jr., M. D.

After the poultry had been thoroughly discussed, an Essay was read by the Secretary, prepared by A. S. Packard, Jr., M. D., upon "The Colorado Beetle."

This beetle was originally described by Mr. Say, in 1824, having been found by him the year previous, when he remarked: "This species seems to be not uncommon on the Upper Missouri, where it was obtained by Mr. Nuttall and by myself. The variety (white, with two of the lines united, probably the species juncta), I found on the Arkansa" (Journal Academy of Natural Sciences, Phil. iii, 1824). This would indicate that its natural habitat was the plains of Dakota, Western Nebraska, and Kansas, Colorado, and perhaps the western portion of Indian Territory and Texas. Dr. G. H. Horn, the well-known Coleopterist, writes me as follows: "West of the Mississippi I have it from Texas. I have never seen it from Mexico nor west of the Rocky Mountains. If it goes west I believe it will be through New Mexico and Arizona, and not over the Rocky Mountains." Probably coextensive with the original distribution of the Colorado potato beetle, is that of its original food-plant, a wild species of the *Solanum*, concerning which Mr. Sereno Watson, the botanist of the United States geographical survey of the 100th parallel, thus writes me: "The *Solanum rostratum* ranges from Texas and New Mexico to the Upper Missouri eastward of the mountains. I have no evidence of its being found at all west of the Rocky Mountains, and indeed the order appears to be almost wholly wanting throughout the entire Great Basin."

In going to Colorado in 1875, while attached to Prof. F. V. Hayden's Geological survey of the Territories, I first met with this beetle at Lawrence, Kansas, where Prof. F. H. Snow told me it was chiefly confined to the *Solanum rostratum*, a roadside weed, which is now very common in Kansas and draws off the beetle from the potato, which consequently suffers comparatively little from its attacks in that State. The question arises whether the cultivation of this weed around potato fields in the East may not be a means of relief from its attacks, though it might breed in still larger numbers if that were possible. In Colorado I first noticed the beetle in the vicinity of Denver, where it was not then common, but earlier in the season had ravaged potato fields out of town. At Golden, July 3d, it was observed in abundance on *Solanum rostratum*, not only the eggs but the larvæ in all stages as well as the beetles. I was told by one farmer that he had two rows of potatoes devoured by them early in the season, and they had been abundant locally at Howardsville. It is evident that the ravages of the injury to the potato will always be limited. Five or six miles up Clear Creek Canon it has injured the potato plants for five or six years, but nowhere above an altitude of about 7000 feet could I learn that it occurred, and it seems indigenous only to the plains and the canons among the foothills. None were to be seen at Utah.

The remedies recommended were hand-picking, which is by no means so difficult as many suppose it to be, the use of Paris green, and especially the planting of early varieties only, so that they may ripen and get out of the way by August. If all farmers would adopt this latter method the beetle would soon grow beautifully less. The probabilities are that we shall suffer next year far more extensively than we have the present.

### AFTERNOON SESSION.

## "THE MILK, BUTTER AND CHEESE DAIRY, AND METHODS OF MARKETING,"

BY A. W. CHEEVER, ESQ.

"The Milk, Butter and Cheese Dairy and Methods of Marketing," was the first subject in the afternoon, and it was opened by a paper by A. W. Cheever, Esq., of Sheldonville.

He began by stating that it was a broad subject and one which ought to have more than a single afternoon devoted to it. The speaker said he might refer to various statistical reports, showing the importance and extent of these productions; but he would only call attention to the fact that the value of butter consumed in Massachusetts exceeded that of the bread, and in fact of any other article of diet, excepting meat. Cheese, although really more of an article of food than butter, had not reached it in point of value of production, but it may yet increase beyond it in importance. The production of milk was considered by the essayist to be yet in its infancy as an article of food, but it is destined to become of great importance. The study of the facts relating to dairy products are important, and should be earnestly engaged in by the farmers. The varieties of butter are as varied as the character of persons who produce it. The essayist said he was unprepared to lay down a set rule for making good butter and cheese which would be invariable, but there are certain fundamental principles which every dairyman should understand. The churns which give the best satisfaction to butter makers are those which produce the butter without grinding the cream. He devoted a considerable space to the production of milk for the markets of large cities, and said that nowhere had the business been more profitable than in the vicinity of Worcester. It is the largest city in the State that receives its milk directly from the producers without the aid of middlemen. The one great need of Massachusetts' farmers to-day is a good market arrangement for supplying the city of Boston with milk. Boston furnishes a market for nearly half of the State, and he doubted if there had been a single gallon of absolutely pure milk sold there for years. He detailed at some length the way in which the business is now conducted, condemning the system as wholly bad. If the Boston market could be purified of its evils it would be a great benefit to both producer and consumer.

THE COW THAT IS NEEDED

in Massachusetts was the next point considered. We need a breed of uniformly good cows, for we have no room for an animal that is good for nothing except beef; but our cows should be of such a character that they could be turned into beef before their days of usefulness were passed. The milk trade is demoralized because every quart of milk is taken to represent every other quart of milk in quality and value. We have been trying too long to show how poor a quality of milk can be produced and sold, and no attention had been paid to the value of the best qualities of milk as food. To remedy this evil the consumers must learn to know what good milk is and be willing to pay a fair price for it. With a uniform breed of cows, many of the existing evils could be remedied. The essayist discussed the relative merits of the Devons, Shorthorns, Jerseys and Ayrshires, but thought by careful selection and breeding from our best native stock a breed could be produced which would supply the great need of our farmers. He also discussed the importance of a liberal supply of the proper food of milk producing cows.

THE DISCUSSION

which followed the reading of the paper was quite interesting. The first gentleman to speak was T. S. Gold, Esq., of the Connecticut State Board of Agriculture. He took exception to the idea advanced in the paper that the great need of the farmer could be supplied by breeding only from the native stock, and in his remarks favored the Ayrshire, saying that their milk was not of so poor a quality as had been represented. The cream does not separate readily from it, and the skimmed milk is richer and does not have the blue and poor appearance of that produced by some other breeds of cattle. Mr. Cheever said he had not had time to properly prepare his essay and he felt that he had not made all his points perfectly clear. He did not wish to have it understood that he classed the Ayrshire cow as a "water cow;" but the point he wished to make clear was that Massachusetts farmers should have a uniform breed of cows producing good milk because it was to be a milk rather than a butter producing State. Mr. Ellsworth of Barre was called upon, and said: The subject which has been so well handled by the essayist is one of great importance to this State. He has told us that butter could be produced by almost any method; but the point we want to get at is how to make the best butter in the most economical manner. He has also told us that there are good cows for butter in almost any breed; but the Jersey makes good butter perhaps more readily than any of the others. The speaker then gave a description of his process of heating milk and making from it both butter and cheese. He first submits it to a temperature of 130 degrees to make it perfectly sound and keep it so. He makes butter from the cream which rises, adds the buttermilk to the skimmed milk, and has succeeded in producing very good cheese. The whey which remains has proved a valuable food for pigs. He also discussed the production and sale of milk in a general way.

Dr. George B. Loring of Salem was present, and was called upon to address the meeting. The dairy itself and its position in the agricultural world, said the doctor, is one of the most interesting subjects for farmers to discuss. Those persons who raise special crops, as the tobacco and cotton growers of the South, know very well what they can depend upon, but the products of the dairy are more uncertain. The land suitable for dairy purposes occupies comparatively a narrow belt in the temperate zone. There are no dairy lands in the Arctic zone and none near the equator. He spoke of the extreme sensitiveness of the organs which a dairy cow uses in the production of milk, saying that a cruel blow from the boy who drives her, an awkward milker, a sudden thunder storm, or a cold barn in winter would greatly injure her usefulness. She must have the most favorable surroundings, be kept from harm and in cold weather have good food and drink. She will then produce a good quantity of milk which will make good butter. He spoke of cream and the law regarding its change into butter, and said that long continued heat or extreme cold would destroy the globules and render it unfit for butter; it should be kept at an even temperature. He discussed the cow which is needed by the Massachusetts farmer, and spoke of the changes which have been wrought in our climate on some of the descendants of imported stock. In Worcester county the Durham stock has come to resemble the Ayrshire in many particulars; and he believed that New England would yet produce the cosmopolitan cow which should be just the animal needed by the farmer. At the close of Dr. Loring's speech the meeting adjourned.

### EVENING SESSION.

## "THE FARMER'S HOMESTEAD IN ITS RELATION TO FARM THRIFT."

BY DONALD G. MITCHELL, ESQ.

The "Farmer's Homestead in Relation to Farm Thrift" was the subject of Donald G. Mitchell's lecture to a large audience in the evening. The lecture throughout was characterized by that pleasant vein which runs through the works of "Ik Marvel," and which in connection with the many witticisms made the lecture not only valuable for its suggestions but likewise a pleasing literary treat. The following is a brief report of the lecture:

The subject of "*Vegetable Gardening and Root Culture*" occupied the closing session, and it was introduced by Benjamin P. Ware of Marlborough, with the aid of a tableful of choice specimens which enabled him to give a complete and graphically illustrated object lesson.

He proposed, he said, to speak of standard vegetables, the modes of culture and the markets. In the market a great change has taken place. The perfected condition of transportation supplies a corner in onions or any other product. He spoke of the condition of the market in past years, contrasting it with the market of the present. The question what shall we grow is almost as important as how shall we grow it. We must consider the wants of our home market, and avail ourselves to what extent we shall raise. A few years ago it was desirable to raise early potatoes and peas, but the facilities for transportation have done away with this speculation in crops. He first took up the potato, saying that by high cultivation great results might be obtained, but the quality suffered in consequence of heavy manuring. In fact the quantity and not the quality could be raised from the use of Peruvian guano alone on the same ground. He spoke of the methods of manuring, recommending a broad plowing, spread the manure and harrow in, furrow and plant ten inches apart, two eyes in a piece, and cover with a plough. Then go over with a drag, destroying the first weeds that break the ground, and in mowing use the cultivators, and in hilling plough if you do not wish to use the hoes, and you get the full crop with little labor.

The next spoke of the onion crop, considering the Danvers the most profitable. The best method to be taken in raising the crop, and a practical five inches deep on land formerly used for potatoes or corn. The longer the land is used the better crops you get. In an onion field, well cultivated weeds should be used. The importance of good culture and good seed was urged. In the spring, when the land is dry enough, go over it with the cultivators, harrow, then roll to get the ground smooth, and sow, using three pounds to the acre. Then comes careful culture. The hoeing was then explained in detail, the speaker recommending the importance of the farmers' implements. Sowers were next described in detail, the speaker urging the importance of having the fertilizer which should get at the seed as soon as put in the ground. The process of weeding was spoken of in detail, Mr. Ware showing several implements of his own manufacture which had employed in the work to good advantage. To break down the stiff-necked onions he recommended the use of a flour barrel made heavy, and which would break down the tops at a stroke. He then spoke of the harvesting, the necessity of keeping them dry being strongly urged. Seeds and seeding were spoken of at some length, the speaker saying it was useless to try to raise a crop on a piece of ground where smut has once made its appearance, and cautioning against the use of seed on smutty ground elsewhere until it has been thoroughly cleansed. Being asked about the maggot, he said it was produced by a small insect, which he described. He also spoke of the slit skimmer. They deposit their eggs as soon as the onion comes up, either on the onion itself or a piece of dirt near it. The eggs hatch at the proper time, and the rascals plunge down to get at the bottom of the onion, where they crawl in and eat the heart of the onion; one killed, they go to another and so on. Mr. Ware also recommended deep planting, cautioning his hearers not to plant lower than two inches, and use more seed or they would lose the crop. Good corn land is not needed good onion land but had known good crops on clayey land.

The carrot crop was next discussed, the intermediate carrot receiving particular attention. The ground should be prepared very much as for onions. It is not necessary but better to apply the manure in the fall. Let the land lay until about the 25th of May after getting ready, then plough again, harrow and drag, sow fifteen inches apart, one pound to the acre, being careful to sow in rows to use the cultivating implements. After the second or third weeding the tops will be large enough, so that weeds will not grow. In harvesting they may be left in the ground as late as Nov. 13th, but not later, and work should be begun Nov. 1st. He began by cutting off the tops of the carrots with a sharpened shovel; rake them off and cart to the barn; take a sub-soil plough and run at the left of the row, which will lift the carrots about two inches. It requires five men and a pair of horses. After the plough potato diggers should be used in pulling them out of the ground. Continue this till noon. In the afternoon carry them in the barn and store in the forenoon. This he considered as saving fully one-half the labor. The value of the crop in feeding to horses and cows and for the market was spoken of, and twenty-five to thirty-five tons an acre was considered a good yield.

The turnip crop was next considered. The speaker only believed in it as a second crop. August being early enough to sow, after the early peas or potatoes have been cleared away, flat purple top being recommended as good for table use, and for feeding cattle. After sowing, thin and weed with the truckle hoe, top when you get ready. To prevent caliknes, top the turnip so as to destroy the germ upon, and cut off from the root to #13 a ton, which is more than they are worth for farmers to feed.

The cabbage crop was next discussed, the Stone-Mason variety being first considered and its origin described. To prevent their splitting while growing pull them a little, but don't pull them up. This stops their growing and prevents cracking. The Faulkner cabbage was also spoken of at length, being considered with the Stone-Mason cabbage the standard. The Savoy cabbage was more delicate and more desirable for a choice table article.

Squashes were then spoken of, the origin of the Hubbard being given, the Turban and Marrow also being discussed at some length. In cultivating they want good land and plenty of manure; plant five in a hill, sticking the seeds in point first. They are the enemies, the striped bug, which should be treated with air slacked lime; the black bug, which should be trapped by a shingle, which will attract them, and in the morning stamping on the shingle will kill them. The maggots can only be treated by sowing more than are wanted. To keep squashes keep them dry and dry and throw out the rotten. Can not as soon as soon as the rot is discovered. In manuring be careful to spread the manure and plant from May 15th until June 10th.

A discussion followed in which various opinions were expressed in regard to the different seed sowers. Mr. Ware uses Wiltis's somewhat modified and improved by himself. Capt. Moore thought Underhill's had been adopted as better by the market gardeners of Arlington.

After passing a vote of thanks for the hospitality of the citizens of Worcester, the Board adjourned


# The Ploughman.

BOSTON, SATURDAY, NOV. 25, 1876.


The report of the proceedings of the *State Board of Agriculture* at Worcester, will be read in our present issue, with lively interest. It conveys to the mind of the reader an excellent idea of the several meetings of the Institute, which could be made more vivid only by actual attendance on them. Worcester showed its customary generosity and courtesy in providing the fine collation which was so thoroughly enjoyed, and has once more proved her strong love for the interests of Agriculture by the attention she pays to the representative farmers of the State. The arrangements for the Institute meetings were also extremely satisfactory, aiding in the successful execution of the State Board's original design.

The storm has caused a very wide extent of damage. For a long time it was a gale. Houses were torn down, chimneys topped over, cellars flooded, leaks started in a majority of roofs, telegraphs wires prostrated, vessels driven aimlessly about, shipwrecks experienced on the coast, with more or less loss of life. We shall have no harder storm this winter.

## THANKSGIVING.

The annual Thanksgiving will come and go again before another issue of the *Ploughman*, and we therefore make our customary record of the delightful social event in advance of its coming. The official proclamations have told us all what we are to be thankful for, while every one understands for himself how to celebrate the happy old Anniversary in the most effective way. It is the day of family reunions, and these keep society sweet and whole. The long tables that are to groan with plenty and reflect their rows of happy human faces, have become the sign and token of the Day. And those who "eat the fat and drink the sweet" will only enjoy their festivity the more after they have taken care that nobody about them suffers from hunger and buries the day in a silent loneliness.

The idea of Thanksgiving is to be happy and to make others happy. There is a great deal of youth packed into it and into its associations and memories. Never does Home seem so delightful to the absent ones who now return. The smokes from the chimneys seem to be charged with the savors of the busy kitchen. The farmer is the one to make the most of this dear old Puritan festival, for he has all the conditions of success in his hands. The country tables and country firesides are objects of envy now to all city dwellers, who wish they had an ancestral roof-tree under which they could sit down and be happy.

## BUYING UP FARMS.

While the organized agricultural influence in New Hampshire is taking practical measures to invite and assist men out of employment to purchase the deserted farms of which there is reported to be some two thousand in the State, we observe with equal, if not greater pleasure that there is an active movement going on in Western Massachusetts to the same end, but to be carried out by individuals themselves. Both of these movements, in fact, indicate a healthy reaction from the frenzy for cities that has had its run of late years in the minds of our people. Even although the recent census of the State goes to show that the tendency of our population in Massachusetts is from the country to the cities and towns, this proof of a return to the farms is just as welcome as if it refuted such an unpalatable statement altogether.

It appears that the demand is for low-priced farms, ranging from twelve hundred to three thousand dollars, and that they are bought by mechanics and men to whom the attractions of a trading career have nothing further to offer. This shows a remarkably healthy fact, namely, that the fever for rapid gains is beginning to cool off, and that men are disposed to estimate happiness by some other standard than the delusive one of money. They are brought by the trying experience of the past three years, following so close on a long term of expansion and expense, to see and confess that on the land a living for the family is at least secure; that with no landlord to threaten and no weekly bills to press, they may enjoy domestic comfort and tranquility, walk on acres of their own, acknowledge no master, and work for themselves instead of for wages.

This is what is meant by the farmer's independence. No man in health who subsists on his own estate, whatever its limits, can understand what it is to be under a constant mortage of his time and exertions to somebody else. In prosecuting ordinary farm-work, all is done in and around home. There is no bell or whistle to call, and no going away from the sight of the chimneys. It is domestic life all the way through. Of hard labor there is of course enough, yet there is a far wider field for the exercise of the mental powers in managing a farm than in executing the special task of a single branch of any kind of purely mechanical labor. To the aspiring man, possessing a genuine thirst for practical knowledge with the potentiality of creation in it, the agricultural occupation offers opportunities of which the most skilled mechanic, taught on but one side, can have no immediate conception.

We truly hope that the turn of the tide which we are permitted to record is the symptom of a change that is to prove radical throughout New England. It is time that families planted themselves in the country again, running down their roots deeply in the soil, constructing a society of simplicity and genuine health, and consenting to pass their lives in scenes whose associations are capable of being transmitted to a late posterity. This purchase of small farms that are threatened with the desertion of their owners marks a new era, for whose introduction our great agricultural societies have not labored in vain. When we think of what New England, with its enterprising and resolute population, is capable of compelling in the way of agricultural products, we feel the assurance that time and events will surely lead that population to concentrate its energies on a soil that refuses nothing of value to the hand of diligence and the step of progress.

## SCHOOL SAVINGS BANKS.

The plan of introducing the savings bank system into schools has for some ten years been successfully practiced in Belgium and certain parts of France. It may seem utopian on the one side and inappropriate on the other, but its practical results have been found so favorable for both pupil and parent that the system has within the last two years been introduced into England, with the strongest expectations of producing good fruits. In France, some twenty-three hundred schools, distributed through fifty-three departments, are supplied with the extremely simple machinery requisite for working the idea; and it is now reported in consequence that 155,000 school children's names are entered on the books of the government's savings banks.

The idea is to teach children frugality and thrift. There is no call for instructing any one in the rules of parsimony; certainly none for so instructing young children; but to instil into the minds of youthful pupils the universal truth that power of all kinds is to be had only by the primary process of storing, and that waste and indifference are in direct opposition to the divine law, which will have every atom perform its full part in creation, is as high an object of public instruction as arithmetic and reading, and enters with practical force into the formation and development of juvenile character. There is an obvious morality in such a plan, and those who will watch the present habits of children in our public schools will hardly be able to miss it.

Parents are instructed in this essential rule for success in life through the children. The work thus spreads its influence and is felt in the general structure of society. The aggregation of the sums contributed by individual pupils becomes large in a little time. In Bordeaux, France, the system was extended last year to fifty-three schools, and the sum of ten thousand dollars then stood to the credit of the young depositors. Two thousand dollars more had been given to the sufferers by the enundation of the Garonne, showing that the saving habit had not hardened the childish heart. In the department of the Aisne, there were six thousand pupils' names inscribed on the books of the bank, which represents an aggregate deposit of thirty thousand dollars.

Properly conducted, we are by no means unprepared to say that this system of savings banks for public schools is not one of a fruitful promise. If it errs, its errors are on the safe side. Boys and girls ordinarily leave school with but loose ideas on the subject of money. If it be made, however, a matter for reflection, adequate as it certainly is to their developing mental powers, they enter on the work of the world with at least clear and fixed ideas about the true signification of money and its place in the economy of life and character, and can go forward without any serious fears from stumbling. And who can say that the early incalculation of healthy habit of saving may not solve many other problems for which legislation itself proves lamentably insufficient.

## THE FOREIGN NEWS.

The outlook in Europe at the last advices is more pacific, for the reason that the Czar of Russia, in an interview with Lord Loftus, the British Ambassador, has given him his word of honor that he had no designs on Constantinople and no desire of territorial conquest. The Czar explained that he had sent his ultimatum to the Porte because he feared that Bulgarian atrocities would follow the destruction of the Servian army. He added that the Porte had steadily frustrated all attempts at pacification by wily manœuvreing, and that the situation had at last become intolerable. Unless Europe was ready to act promptly and energetically, he declared that he would act alone. He expressed a regret that Russia was so suspiciously regarded in England.

The language of the Czar, as reported in Lord Loftus's despatch to the British Government is so remarkable as to deserve a literal repetition. Says Lord Loftus: "The Czar pledged his sacred word of honor in the most earnest and solemn manner that he had no intention of acquiring Constantinople, and that, if necessity should force him to occupy a portion of Bulgaria, it would only be provisionally until the peace and safety of the Christian population were secured. The Czar could not understand, when both countries had a common object, namely, amelioration of the condition of the Christians, and when he had given every proof that he had no desire for conquest, why there should not be a perfect understanding between England and Russia, based on a policy of peace, which would be equally beneficial to their mutual interests, and to the interests of Europe generally. The Czar said that nothing could be more absurd than the intentions attributed to Russia of the future conquest of India, which was a perfect impossibility. He deeply deplored the distrust manifested in England, earnestly requested me to do my utmost to dispel it, and charged me to convey to Her Majesty's government the solemn assurances he had given me.

The Russian Government asked of the British leave to publish the correspondence for the sake of its influence on the population of Russia, and the request was readily granted. Russia and Turkey, however, continue their preparations for war. Austria has decided not to oppose a Russian invasion of Bulgaria or an English occupation of Constantinople, but means to preserve perfect neutrality. Italy seems to be convinced of the necessity of the reforms proposed, and is showing a willingness to give Europe satisfactory guarantees for their execution. Between England and Russia there is for the present a decidedly better feeling.

## THE STORM.

A NORTHERLY GALE AND A HEAVY RAIN-FALL.

The storm of the current week has been universally severe and protracted, even for an inclement season of the year. The total rain-fall has been 6.06 inches. The highest velocity of the wind has been 48 miles an hour, with an average somewhat below that, but no long drawn out in its violence that a very heavy sea has been stirred up that will along the coast, occasioning considerable anxiety for the safety of vessels.

The marine disasters reported, however, have been few and not of a serious nature. The wind has been far enough to the north to allow vessels to work out to sea, and the storm signals, displayed for hours before the storm arrived, gave timely warning to mariners in port. But little damage on land is reported in this vicinity, or elsewhere. The gathering injury has been to many leaky roofs and cornices which have been unable to withstand the pelting rain. The interiors of dwelling houses have been in many instances badly defaced, and the damage to machinery in manufacturing establishments, from rust, will probably be considerable.

The Boston and Albany Railroad Corporation is now engaged in paying out an $800,000 dividend.

The Rev. Joseph Cook, of this city, is evidently wanted elsewhere also. New York has given him an emphatic summons, and now Chicago calls him loudly.

There was trade between this port and the South and India has been of late very lively.

A Wareham man has sailed in his own yacht for Florida, taking his two young boys with him.

The magazines are out again in every variety of attraction, showing what a substantial support they receive from the great reading public.

Ex-Gov. Gaston is widely spoken of as a candidate for Mayor.

Russia appears to be bent on war, and England's making all the speed of preparation that she can.

Baron Von Palm body is to be cremated in the presence of several representative bodies, at Washington, Penn., on the 6th of December.

Read the numerous stories of golden weddings in the papers, and then say that there are no old people living in our times.

Here is the case of an old lady of eighty-five, in Vermont, who has made twenty-one cheeses the past season.

The tramps be upon New Bedford.

The suspended West Boston Savings Bank will probably resume business on the 1st of April next.

And even Texas has had its baby show, with the usual commotion of feeling among the young mothers.

That was a big easterly storm that winnowed this section of the country, the first of the week.

The Providence Tool Company continues to turn out guns for the Turkish Government, for which the latter continues to pay.

New Haven, Conn., is moving to convert the old State House on the green into a museum of rats.

The potato bug has met his fate in the parasite mite, and his home is in the Atlantic Ocean.

Coal oil from the Canadian wells is now being shipped to Europe from Portland in considerable quantities.

Both the imports and exports of the city are on the increase.

The late Cardinal Antonelli left six millions of dollars.

The yield of gold by California this year is estimated at twenty millions.

## READ AND RUN.

— THANKSGIVING will have come and gone before another issue of the *Ploughman*.

— The betters in New York have been thrown into a sort of panic by the rumor that the amount of the pools was to be seized by the legal authorities and turned over to charitable uses. That would be a settler on them.

— The Woman Suffrage party in Massachusetts claims to have cast from twelve to thirteen thousand votes in the recent election.

— Business interests are seriously held in check by the uncertainty attending the result of the Presidential election.

— Two men have been arrested in Chicago, on suspicion of being the ones who invaded the tomb of President Lincoln on election night.

— Four intoxicated men came very near being swept over Niagara Falls, last week. One of them, as soon as he reached the shore, made haste for the nearest bar-room.

— The destruction of human life by cyclone in Eastern Bengal is absolutely appaling.

— The whiskey ring thieves are being pardoned out of prison, one by one.

— Thomas Ball's statue of Daniel Webster is to be inaugurated in Central Park, New York, on Saturday.

— Uncle Dan'l Drew, the noted financier of New York, was in court again the other day, in response to a suit by a Wall street broker. He is said to look better than he did.

— Lamb is plenty and cheap in the market selling at retail from nine to fifteen cents.

— There were 764 convicts in the State Prison last Saturday.

— The Committee appointed by the Legislature for the revision of the Judicial System of the State will report to the Governor by the 20th of December.

— Digging up and laying down the streets appears to be a sort of pastime. It would be so much nicer if one could but feel settled.

— Germany shows symptoms of pettishness, and refuses to take any part in the Paris Exhibition of 1878. That is not in the international spirit at all.

— The New York reporters waylay the Vanderbilt mansion with a regular force of scouts and pickets, eager to pick up the very latest phase of his heal.h.

— The theatres of the city are doing a lively business, their cards proving all very attractive.

— Every Pullman car in the country, owned by the company of course, netted the sum of $2634 last year. That is very fair house rent, calling the cost of a car the same as that of a substantial dwelling.

— Yale was the winner last Saturday in the football contest with Harvard. A contemporary cruelly suggests that big feet did it. It was accounted a big feat, for all that.

— Those who do the selling of kid gloves say that there are more No. Sixes sold than of any other size.

— The boys at Harvard are already practising for next summer's boat race. The early bird takes the worm.

— Clara Louise Kellogg is adding to her fortune rapidly by singing to Western audiences.

— There is but one more month in Leap Year. A few people may thank us for reminding them of it.

— The author of the well known song—" When this cruel war is over "—claims to have received $20,000 for his copyright so far.

— The talk of weddings for the coming winter is very loud, and large expectations are formed respecting their number.

— The sales of good trotting stock have of late been quite frequent in various directions around Boston. The stock farms are turning out good products.

— The Church Congress, which was in session in the city last week, adjourned after a series of meetings at which the widest interest was manifested.

— The artists of Boston are offering the fruits of their season's work for sale at the galleries. It is a good time to obtain some nice pictures at reasonable prices.

— Boffin's Bower opens its Fair on the 15th of December, and Hon. F. W. Bird will preside at the opening.

— The Boston Dental College is on its ninth year, and has thirty-nine students in attendance.

— The barber at the New England House, in this city, was presented on Saturday last with a watch and chain, valued at $250, by his many friends in and about the Market.

— The Christian Union gave free rides to 357 invalids during the summer.

— The Harbor Commissioners have accumulated a State "compensation fund" of $100,000.

— The distance of twenty miles between Mansfield and Providence was made the other day by some carrier pigeons in seventeen minutes.

— Sixty-five persons sailed on Tuesday from Boston for Fernandina, Florida, and others are to follow instantly. They will report for Thanksgiving.

— Good manly, robust common sense, with a bright and well cultivated intellect to operate it, is worth more as a gift to the average man than all the mere money he chooses to scrape and scramble for.

— The full proceedings of the Institute at Worcester last week will be read with a lively interest by everybody. The story is all there.

— A ship has just sailed from this port for Hong Kong, China, carrying out some two hundred tons of steamboat coal. Similar shipments from Liverpool are very common, but it is a new feature here.

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## THE GREAT CYCLONE.

The Great Cyclone.—The report of the unparalelled destruction of human beings in Eastern Bengal, on the islands of that district of India, by a tidal wave which was blown up by a cyclone, is one of the most appalling events in modern history. Three large islands, besides numerous smaller ones, were swept by a wave full twenty feet high, and the inhabitants almost in a body were washed out to sea and never more heard from. The great wave invaded the main land for a distance of six miles into the interior. The whole country in that region being perfectly flat, there was no chance of safety but in the dense groves of cocoanut and palm trees to which many of the people clung. Yet the desolation was complete, involving the destruction of more than three hundred thousand lives. It is a statement which none of us can realise. The bodies lying about threatened the outbreak of cholera as the result.

New Stock Yards.—The projected cattle yards at Brighton are now completed, and the Boston and Albany Railroad is to be credited with this great additional convenience for the supplies of the city. The new yards were opened with due ceremony on Monday, and Tuesday was the regular weekly market day. The avenues of the new yard are paved with square blocks of granite and are thirty-six feet wide. The pens are six feet in height, strongly built, paved with cobble stones, and furnished with hog racks and covered watering troughs. There are one hundred and sixty of them. At the centre of the yard is a wooden building, in which is placed a fine Fairbanks scale, capable of weighing fifty head of heavy cattle at once. There is a horse sale yard near by, with forty-eight stalls. Other facilities, with a hotel, are yet to be provided.

The Dismantled Exhibition.—As in a twinkling, the great Exhibition is coming to pieces again. It is being resolved into its constituents and is fast passing out of sight. The Corliss engine will be the last thing in possession of the field. That was the great heart that put pulsation into the whole Exhibition, and it never failed to receive the respect of the vast daily assemblages. The buildings are denuded. Where but so lately was order, ornament, grace, and a fullness without end, to-day is a sound of hammers, the rattle of carts, the hurry of porters and workmen and a general look of desolation. It hardly seems possible that the representative life of so many nations was gathered in that place all summer long and through almost the entire autumn. In its very desolation, however, the scene of yesterday's varied currents of life is as interesting by contrast as the other was inspiring. We may have other International exhibitions, but we shall have none that represent a Centennial.

The Door Open to Trade.—By the adoption of the equal rate system, in place of the troublesome mileage system, for through freight transportation from the West, Boston has before it a future that it feared it would have a long time to wait for. We are to receive cargoes from the Western cities for export on the same terms with New York, Philadelphia and Baltimore; and that of course gives us an equal chance with those cities to make the most of our natural advantages of situation. It is expected that the trade of Boston will develope itself at once, under this liberal rule, to large proportions. The facilities we now have in hand to meet this new opportunity are sufficient for the time being, and will be added to as fast as increasing business warrants or demands. This decision of the Western trunk railroads is equivalent to tying Massachusetts to the Mississippi Valley.

## CARDINALS AND THE POPE.

[From Anne Brewster's Letter.]

One of the most remarkable changes in personal appearance has taken place in Cardinal Buonaparte. He is not an old man in years, not over fifty, and yet he looks like a decr-pit man of eighty. We all remember his fine soldierly walk and youthful look during the Council winter. Now it seems as if he might have been the victim of any number of paralytic strokes. He goes shuffling his handsome, small feet about, in huge red shoes; walks bent over and leaning on a cane, and trembling as if with extreme age. There are some who say it is a mask, and recall the old story of Sixtus Quint: but the Buonaparte Cardinal may as well enjoy his vigorous mid-age, if he really has it, openly; he has not the shadow of a chance in a conclave, not if he went in carried in a litter, and pretended to have both feet in the grave. It is the Pope's desire, it is said, that a foreign Cardinal may be elected the future Pope, in order to engage foreign interest in Papal affairs. Spain is about the only European government that might undertake such a mission and even she could hardly do it safely. Cardinal Panebianco, however, is one of the Italian Cardinals who is regarded as *papeggiante* likely to be Pope.

☞ A distinguished author says: "I resolved, when I was a child, never to use a word which I could not pronounce before my mother without offending her." He kept his resolution, and became a pure-minded, noble, honored gentleman. His rule and example are worthy of imitation.

## LOCAL NOTICES.

☞ Chickering & Sons have kept quiet while some of their rivals have been indulging in a war of words, but they now come to the front with a report which well sustains what is claimed for their pianos. Quality of tone has always been with them a higher consideration than mere power. The judges have fully recognized this "pure, delicate and singing quality of tone," and praise its volume, as also the touch and workmanship.

FRANK MILLER'S HARNESS OIL received the highest and only award at the Centennial Exhibition.

☞ No more ingenious game has been devised for many years than the *Table Game of Base Ball* sold by the Pope Manufacturing Co., 45 High Street, Boston, Mass. Price $1.50. Send for circular.

FRANK MILLER'S LEATHER PRESERVATIVE and Water Proof Blacking received the highest and only award at the Centennial Exhibition.

☞ Vegetine has never failed to cure the most inkeeble case of canker.

DO IT AT ONCE.—It a tithe of the testimonials now on hand of the value of Dr. WISTAR'S BALSAM OF WILD CHERRY should be published, no one would stop to read the lengthy volume. Ask any druggist and he will tell you that this BALSAM is a real blessing to all affected with throat or lung diseases. All kindred affections, including Bronchitis, Sore Throat, Croup, Hoarseness, Pains in the Chest, and Bleeding of the Lungs, yield to its wonderful power. We advise any one tired of experimenting with Physicians or quack medicines to drop them at once and use this BALSAM OF WILD CHERRY. 50 cents and $1.00 a bottle. Sold by all druggists.

THE NEW WEST.—This term is applied to the great Valley of the Arkansas which has just been opened to settlement by the extension of the Atchinson, Topeka and Santa Fe R. R. The company are now offering 2½ millions of acres of the choicest land in the world at prices ranging from $2.50 to $8.00 per acre on eleven years credit. The certainty of a rapid rise in the value of these lands and the immense crops produced on them is attracting the attention of the whole country, and those who contemplate moving West should send at once for circulars and full information to W. R. Peabody,
197 Washington street, Boston.

# Domestic Markets.

## WHOLESALE PRICES.

### BOSTON PRODUCE MARKET.

**Flour.**—The demand has been confined to small lots, and the sales have been within range of quotations. We quote export at $6 50@$7 75 ₩ bbl for Western, and $4 75@$5 00 for Southern; common extras at $5 00@$5 50; Wisconsin and Minnesota extras at $5 75@$7 25; St. Louis do. at $6 50@$8 25, with one or two brands at a higher figure; Michigan at $6 37½@7 00; Southern flour at $5 25@$8 25, the latter price for a fancy brand; Fancy Minnesotas at $7 50@9 50, with one or two brands at a higher price.

**Corn.**—There is a moderate demand at prices ranging from 62@64c ₩ bush for mixed; yellow is scarce, and is quoted at 66c.

**Oats.**—Market dull, and there is only a moderate demand for any grade. Rejected oats sell at 34@35c, and mixed and Nos. 1 and 2 white at 36@37c ₩ bush.

**Shorts.**—There is a good supply of Shorts at $14 00 ₩ ton. Feed and Middlings range from $16 50@22 00 ₩ ton.

**Butter.**—Trade is dull, and the market for all descriptions is quiet. There is but little strictly fine fall made butter in the market, and this description is firmly held. Medium and common grades are quiet, and prices are weak. We quote Western creameries at 32@35c; choice New York and Vermont fall butter at 32@34c; long dairies at 30@32c; ladle and tub at 28@30c; choice packed Western butter at 22@25c; common Western at 15@18c ₩ lb. Jobbers' prices are from two to five c

## LE MARKET.

during the week were
l last week 205 cars, or
2,244 head. The sup-
ge quality of Natives,
, and 12 of Coloradoes.
pening on Friday has
advance of 10@15c #
l heavy weight native
we cannot note any
for the week reach
2,500 head. The high-
# lb live weight, but
l for selections. Choice
er figure.
le at Chicago for East-
ernator cars was com-
and this will doubtless
ur meat market, but
the close of the month.
80 head Sheep were
Williamsburg dealers,
the head, at $12 00@
to good. Milkers to
sold to dealers in the
80 for fine to good.
The supply of Sheep
estern and made up of
mmon Illinois; there
a small number from
Indiana. The demand
the supply of a very
y a few having been
uote common to fair
and good to extra 5@
done in Lambs than
shington Market has
e quote Lambs, com-
to good 5 75@6 25, and
@6 75@6 87½, and

## A MARKET.

es about the same as
aylvania and Western
to good 4 75@5 50,
up to 6 00@6 12½; sales at
sales at 7 50@8 00.

## TLE MARKET.

k the market through
own much activity than
time past. We quote
e selling at the former
d near the higher

f Cattle ranged as fol-
@ 5 25; that generally
4 87; a few of good
ordinary thin Steers,
0; general average of
me range of prices
sales were from $3 75
@5 75 ets for common
@6 87½ for fair to best.
her sheep at 4 @5c #
d head.—*Baltimore*

## LE MARKET.

rds prize, there was
@ 10c lbs,
outside figures quoted
w instances, owing to
choice or extra steers,
The range for fair to
50 lbs averages. Cows
ve steers sold on local
poor to fair, and at
to good lots. As the
been a noticeable fall-
Texas and Colorado
ers sale, full prices can
We quote grades and

$8 00@8 25; good to
@8 50; fair to medium
00 to fair steers, $3 75
stock, and inferior to
@4 00; a few of choice
@5 00 for good to fair
@3 75 for good to choice
culls and inferior lots

or the past week was
onfined entirely to the
ere there was no over-
ket was active and
ere in demand at $3 75
to medium at $2 75@

## ET, BOSTON.

### Prices.

### ICY MARKET.

*f, &c.*

*e Son, Nos. 49 & 51.*

| | |
|---|---|
| Family, bbl | 15 00 @20 00 |
| Straight, bbl | 24 00 @26 00 |

*Lord, &c.*

*Flint & Co., No. 29.*

| | |
|---|---|
| Ohio Prime | 16 @ 16½ |
| Lard, # lb | 11 @ 11½ |
| Ohio lard, lb | 11 @ 11½ |
| Hams, Boston | |
| # lb | 12 @ 14 |
| Hogs, whole | @ |

### ad Mutton.

*k & Son, Nos. 9 & 11.*

| | |
|---|---|
| Lamb, sp'g, lb | 16 @ 20 |
| Do. w'r | 10 @ 12 |

### ese, &c.

*amberlin & Co., No. 70.*

CHEESE.

| | |
|---|---|
| Fine Factory | 13 @ 13½ |
| Fair to good do | 11 @ 12½ |
| Farm | 8 @ 11 |

Eggs.

| | |
|---|---|
| Eastern | @ 28 |
| Northern | @ 26 |
| Western | @ 26 |
| Cape | @ 25 |

### Vegetables.

*ery & Maynard's, No. 97.*

| | |
|---|---|
| Jackson | 2 50 @ 2 75 |
| Peerless | 2 50 @ 2 75 |
| Beans, white— | |
| Medium, bu | 1 25 @ 1 75 |
| Pea, bushel | 1 25 @ 1 75 |
| Squashes, cwt— | |
| Hubbard | @ 1 25 |
| # ton | @25 00 |
| Marrow | @ 1 75 |
| # ton | @15 00 |
| Crookneck | @ — |
| Pickles, bbl | @ — |
| Cucumber, # 100 | @2 00 @3 00 |
| Limes | 6 50 @ 7 50 |

## AY MARKET.

### PRICES.

| | |
|---|---|
| Straw, bund | @ 1 00 |

## ED MARKET.

*d Son, 43 North Market St.*

| | |
|---|---|
| Hung's Grass, | |
| bush | 1 25 @ 1 50 |
| Millet, bush | 1 25 @ 1 50 |
| Red Top, bush | 2 25 @ 2 50 |
| R. I. Bent, bu | 2 00 @ 2 50 |
| Winter Rye, | |
| # bush | 1 25 @ 1 50 |
| Wheat, Sp'ng, | |
| # bush | 1 00 @ 1 00 |
| Orch'd Grass, | |
| # bush | 2 00 @ — |

## A TRIUMPH OF MEDICAL SCIENCE.

**The Discovery of a Boston Physician—Paralysis Can be Cured—Success Surpassed in the Treatment of Deformities—Emphatic Proofs that a New Remedy for Nervous Disorders has been Found.**

[WRITTEN FOR THE TIMES.]

Hardly any great revelation of science or triumph of art has been received on its first announcement, with grateful faith by the incredulous majority of men. Galileo announced the fact that the world moved, and the solidified intellect of the world made him recant the assertion on bended knees in sackcloth and ashes. Rising from the ground after this denial of ascertained truth, he is reported to have exclaimed *E pur se muove*—"It does move for all this." His introduction of the telescope, which has since given to us a knowledge of the stars, was met with a similar obstinate prejudice and unbelief. In England it was announced as an invention of the Evil One, and

### NEW PHASE OF SORCERY.

In the realm of medical science this same phase of human folly has been constantly witnessed. Harvey's announcement that the blood circulated through the veins was received with a howl of derision scarcely less vigorous than that which hailed upon Galileo's assertion that the world circulated through space. Harvey's patents abandoned him at the medical profession of the day with almost unanimous cold shoulder. Subsequently his house was attacked by a mob and a number of his cherished books destroyed. And again when Jenner discovered the preventive virtues of vaccination, the medical students of which he was a member forbade him to prosecute his studies on the ground that on applying for membership. The faculty of London denounced him as a bestial quack, and the public joined them and declared poor Jenner and his discovery to be diabolical and monstrous.

So it has been, though in a less degree, with the most discoveries by medical innovators of the past. Lavoisier, one of the first chemists, in Galileo said: "The world does move" All this. These observations are made by the author of the following for another and unprejudiced view, in our own city of Boston and New England, of the new medical science and profession which it deserves.

### THE ECLECTIC SCHOOL.

of medicine is fast growing in popular favor. It is based on the principle that there is in all forms of thought something of value, and that truth should be recognized, and its teachings adopted and used wherever they may be found, or from what quarter they may come. To a spirit of this broad and liberal school of medical practice belongs the honor of having originated entirely new and successful methods of combating paralysis. Paralysis may by reason of its constantly increasing prevalence, the disease of the age. It has hitherto baffled all the ordinary skill of the most

### CAUSES OF PARALYSIS.

Paralysis may proceed from the brain, which is the seat of sensation and volition, or from the spinal marrow and nerves, by which sensation and volition are conveyed to and from the brain. Paralysis may, or it may take eccentric forms of development, and effect special localities in the human organization, depriving the sufferer it power of sight, or of speaking. The most frequent forms of the disease are those of paralyzed motion, and may be thus classified; apoplexy, or softening of the brain; congestion, or pressure of the spinal marrow; and partial paralysis, when from the pressure arising from a morbid growth or tumor, or from mechanical injury, no other than some particular nerve or nerves are supplied by a particular part are paralysed.

### DISEASES OF THE BRAIN

and spinal marrow, undoubtedly, produce the majority of all paralytic attacks. Taking the fact in connection with another fact equally certain, that in the treatment of this fast-going age imposes an excessive strain on our brainal and spinal strength, and we have an explanation of the appalling increase in the number of the victims of this disease. Any scientific discovery, therefore, which shall give us an efficient remedy for this fearful scourge of the human race, must be hailed among the great benefactions which the world has received from its most illustrious

## The Poet's Corner.

### FULFILLMENT.

This is the hour I waited for,
Summer and winter, morn and night,
This is the threshold of the door
That shut me from my heart's delight.
Open at last, and none to stay
My feet from entering to-day;
For dumb and grimly impotent
Stand the old lions in the way.

This is the hour I waited for:
Silently in a dim despair
I cross the echoing corridor,
And mount the windings of the stair.
Her chamber lies a little space
Beyond the shadowy landing-place;
I reach it—stop irresolute—
Then I behold her face to face.

This is the hour I waited for,
Through summer sun and winter rain;
And here the voiceless conqueror
Who makes my vigil all in vain.
Frozen and white from head to feet,
My love lies in her winding-sheet;
Sealed from my touch forevermore
Her lips and eyes that were so sweet.

This this the hour I waited for:—
Every condition to fulfill
I toiled unwearied, and forebore
For heat nor cold, for good nor ill.
Nought that availed for ministry
Too little or too great could be:
To all things else indifferent,
Early and late were one to me.

This is the hour I waited for:—
Passionate purpose, love and pain,
Have waged their ineffectual war,
And these the trophies that remain;
A girl's face fixed in marble rest,
Two pale hands crossed upon her breast,
And one heart emptied of delight
By Life's fulfillments. God knows best!

## Ladies' Department.

## PERILOUS PLAY.

BY LOUISA M. ALCOTT.

"If some one does not propose a new and interesting amusement I shall die of ennui," said pretty Belle Dorothy, in a tone of despair. "I have read all my books, used up all my Berlin wools, and it's too warm to go to town for more. No one can go sailing yet, as the tide is out; we are all nearly tired to death of cards, croquet, and gossip, so what shall we do to while away this endless afternoon? Dr. Meredith, I command you to invent and propose a new game in five minutes."

"To hear is to obey," replied the young man, who lay in the grass at her feet, as he submissively slapped his forehead and felt, on thinking with all his might.

Holding up her finger to preserve silence, Belle pulled out her watch, and waited with an expectant smile. The rest of the young party, who were indolently scattered about under the elms, drew nearer, and brightened visibly, for Dr. Meredith's inventive powers were well-known, and something refreshingly novel might be expected from him.

One gentleman did not stir, but, then, he lay within ear-shot, and merely turned his fine eyes from the sea to the group before him. His glance rested a moment on Belle's piquant figure, for she looked very pretty with her bright hair blowing in the wind, one plump, white hand extended to keep order, and one little foot, in a distracting slipper, just visible below the voluminous folds of her dress.

Then the glance passed to another figure, sitting somewhat apart in a cloud of white muslin, for an airy burnoose floated from head and shoulders, showing in singularly charming face. Pale, and yet brilliant, for the Southern eyes were magnificent, and clear olive cheeks contrasted with darkest hair; lips like a pomegranate flower, and delicate, straight brows, as mobile as the lips. A cluster of crimson flowers, half falling from the loose black braids, and a golden bracelet on the wrist, were the only ornaments she wore, and became her better than the fashionable trippery of her companions.

A book lay on her lap, but her eyes, full of a passionate melancholy, were fixed on the sea, which glittered round an island green and flowery as a summer paradise. Rose St. Just was as beautiful as her Spanish mother, but had inherited the pride and reserve of her English father; and this pride was the thorn which repelled lovers from the human flower.

Mark Done sighed as he looked, and, as if the sigh, low as it was, roused her from her reverie, Rose flashed a quick glance at him, took up her book, and went on reading the legend of "The Lotus Eaters."

"Time is up now, doctor," cried Belle, pocketing her watch with a flourish.

"Ready to report," answered Meredith, sitting up, and producing, a little box of tortoise-shell and gold.

"How mysterious! What is it? Let me see, first!" And Belle removed the cover, looking like an inquisitive child. "Only bonbons; how stupid! That won't do, sir. We don't want to be fed with sugar-plums. We demand to be amused."

"Eat six of these despised bonbons, and you *will* be amused in a new, delicious, and wonderful manner," said the young doctor, laying half-a-dozen on a green leaf, and offering them to me.

"Why, what are they?" she asked, looking at them askance.

"Hasheesh; did you never hear of it?"

"Oh, yes; it's that Indian stuff which brings one fantastic visions, isn't it! I've always wanted to see and taste it, and now I will, cried Belle, nibbling at one of the beanshaped comfits with its green heart.

"I advise you not to try it. People do all sorts of queer things when they take it. I wouldn't for the world," said a prudent young lady, warningly, as all examined the box and its contents.

"Six can do no harm, I give you my word. I take twenty before I can enjoy myself, and some people even more. I've tried many experiments, both on the sick and the well, and nothing ever happened amiss, though the demonstrations were immensely interesting," said Meredith, eating his sugar plums with a tranquil air, which was very convincing to others.

"How shall I feel?" asked Belle, beginning on her second comfit.

"A heavenly dreaminess comes over one, in which they move as if on air. Everything is calm and lovely to them; no pain, no care, no fear of anything, and while it lasts one feels like an angel half asleep."

"But if one takes too much, how then?" said a deep voice behind the doctor.

"Hum! Well, that's not so pleasant, unless one likes phantoms, frenzies, and a touch of nightmare, which seems to last a thousand years. Ever try it, Done?" replied Meredith, turning toward the speaker, who was now leaning on his arm, and looking interested.

"Never. I'm not a good subject for experiments. Too nervous a temperament to play pranks with."

"I should say ten would be about your number. Less than that seldom affects men. Ladies go off sooner, and don't need so many. Miss St. Just, may I offer you a taste of Elysium? I owe my success to you," said the doctor, approaching her deferentially.

"To me! And how?" she asked, lifting her large eyes with a slight smile.

"I was in the depths of despair when my eye caught the title of your book, and I was saved. For I remembered that I had hasheesh in my pocket."

"Are you a lotus-eater?" she said, permitting him to lay the six charmed bonbons on the page.

"My faith, no! I use it for my patients. It is very efficacious in nervous disorders, and is getting to be quite a pet remedy with us."

"I do not want to forget the past, but to read the future. Will hasheesh help me to do that?" asked Rose, with an eager look, which made the young man flush, wondering if he bore any part in her hopes of that veiled future.

"Alas, no. I wish it could, for I, too, long to know my fate," he answered, very low, as he looked into the lovely face before him.

The soft glance changed to one of cool indifference, and Rose gently brushed the hasheesh off her book, saying, with a little gesture of dismissal;

"Then I have no desire to taste Elysium."

The white morsels dropped into the grass at her feet; but Dr. Meredith let them lie, and turning sharply, went back to sun himself in Belle's smiles.

"I've eaten all mine, and so has Evelyn. Mr. Norton will see goblins, I know, for he has taken quantities. I'm glad of it, for he don't believe in it, and I want to have him convinced by making a spectacle of himself for our amusement," said Belle, in great spirits at the new plan.

"When does the trance come on?" asked Evelyn, a shy girl already rather alarmed at what she had done.

"About three hours after you take your dose, though the time varies with different people. Your pulse will rise, heart beat quickly, eyes darken and dilate, and an uplifted sensation will pervade you generally. Then these symptoms change, and the bliss begins. I've seen people sit or lie in one position for hours, rapt in a delicious dream, and wake from it as tranquil as if they had not a nerve in their bodies."

"How charming! I'll take some every time I'm worried. Let me see. It's now four, so our trances will come about seven, and we will devote the evening to manifestations," said Belle.

"Come, Done, try it. We are all going in for the fun. Here's your dose," and Meredith tossed him a dozen bonbons, twisted up in a bit of paper.

"No, thank you; I know myself too well to risk it. If you are all going to turn hasheesh-eaters, you'll need some one to take care of you, so I'll keep sober," tossing the little parcel back.

It fell short, and the doctor, too lazy to pick it up let it lie, merely saying with a laugh:

"Well, I advise any bashful man to take hasheesh when he wants to offer his heart to any fair lady, for it will give him the courage of a hero, the eloquence of a poet, and the ardor of an Italian. Remember that, gentlemen, and come to me when the crises approaches."

"Does it conquer the pride, rouse the pity, and soften the hard hearts of the fair sex?" asked Done.

"I dare say now is the time to settle the fact, for here are two ladies who have imbibed, and in three hours will be in such a seraphic state of mind that 'No' will be an impossibility to them."

"Oh, mercy on us; what *have* we done? If that's the case, I shall shut myself up till my foolish fit is over. Rose, you haven't taken any; I beg you to mount guard over me, and see that I don't disgrace myself by any nonsense. Promise me you will," cried Belle, in half real, half feigned alarm at the consequences of her prank.

"I promise," said Rose, and floated down the green path as noiselessly as a white cloud, with a curious smile on her lips.

"Don't tell any of the rest what we have done, but after tea let us go into the grove and compare notes," said Norton, as Done strolled away to the beach, and the voices of approaching friends broke the summer quiet.

At tea the iniated glanced covertly at one another, and saw, or fancied they saw, the effects of the hasheesh, in a certain suppressed excitement of manner, and unusually brilliant eyes. Belle laughed often, a silvery ringing laugh, pleasant to hear; but when complimented on her good spirits, she looked distressed, and said she could not help her merriment; Meredith was quite calm, but rather dreamy; Evelyn was pale, and her next neighbor heard her heart beat; Norton talked incessantly, but as he talked uncommonly well, no one suspected anything. Done and Miss St. Just watched the others with interest, and were very quiet, especially Rose, who scarcely spoke, but smiled her sweetest, and looked very lovely.

The moon rose early, and the experimenters slipped away to the grove, leaving the outsiders on the lawn as usual. Some bold spirit asked Rose to sing, and she at once complied, pouring out Spanish airs in a voice that melted the hearts of her audience, so full of deep sweetness or tragic pain was it. Done seemed quite carried away, and lay with his face in the grass, and his feet to that would come; till, afraid of openly disgracing himself, he started up and hurried down to the little wharf, where he sat alone, listening to the music with a countenance which plainly revealed to the stars the passion which possessed him. The sound of loud laughter from the grove, followed by entire silence, caused him to wonder what demonstrations were taking place, and half resolved to go and see. But that enchanting voice held him captive, even when a boat put off mysteriously from a point near by, and sailed away like a phantom through the twilight.

Half an hour afterward, a white figure came down the path, and Rose's voice broke in on his midsummer's night dream. The moon shone clearly now, and showed him the anxiety in her face as she said, hurriedly, "Where is Belle?"

"Done sailing, I believe."

"How could you let her go? She was not fit to take care of herself."

"I forgot that."

"So did I; but I promised to watch over her, and I must. Which way did they go?" demanded Rose, wrapping the white mantle about her, and running her eye over the little boats moored below.

"You will follow her?"

"Yes."

"I'll be your guide, then. They went toward the lighthouse; it is too far to row; I am at your service. Oh, say yes," cried Done, leaping into his own skiff, and offering his hand persuasively.

She hesitated an instant and looked at him. He was always pale, and the moonlight seemed to increase this pallor, but his hat brim hid his eyes, and his voice was very quiet. A loud peal of laughter floated over the water, and, as if the sound decided her, she gave him her hand and entered the boat. Done smiled triumphantly as he shook out the sail, which caught the freshening wind, and sent the boat dancing along a path of light.

How lovely it was! All the indescribable allurements of a perfect summer night surrounded them; balmy airs, enchanting moonlight, distant music, and, close at hand, the delicious atmosphere of love, which made itself felt in the eloquent silences that fell between them. Rose seemed to yield to the subtle charm, and leaned back on the cushioned seat, with her beautiful head uncovered, her face full of dreamy softness, and her hands lying loosely clasped before her. She seldom spoke, showed no further anxiety for Belle, and seemed to forget the object of her search, so absorbed was she in some delicious thought which wrapped her in its peace.

Done sat opposite, flushed now, restless, and excited, for his eyes glittered; the hand on the rudder shook, and his voice sounded intense and passionate, even in the utterance of the simplest words. He talked continually and with unusual brilliancy, for, though a man of many accomplishments, he was too indolent or too fastidious to exert himself, except among his peers. Rose seemed to look without seeing, to listen without hearing, and, though she smiled blissfully, the smiles were evidently not for him.

On they sailed, scarcely heeding the bank of black cloud piled up in the horizon, the rising wind, or the silence which covered their solitude. Rose moved once or twice, and lifted her hand as if to speak, but sank back mutely, and the hand fell again, as if it had not energy enough to enforce her wish. A cloud sweeping over the moon, a distant growl of thunder, and the slight gust that struck the sail seemed to rouse her. Done was singing now like one inspired, his hat at his feet, hair in disorder, and a strangely rapturous expression in his eyes, which were fixed on her. She started, shivered, and seemed to recover herself with an effort.

"Where are they?" she asked, looking vainly for the island heights and the other boat.

"They have gone to the beach, I fancy, but we will follow." As Done leaned forward to speak, she saw his face, and shrank back with a sudden flush, for in it she read clearly what she had felt, yet doubted until now. He saw the tell tale blush and gesture, and said impetuously: "You know it now; you cannot deceive me longer, nor daunt me with your pride! Rose, I love you, and dare tell you so to-night!"

"Not now—not here—I will not listen. Turn back, and be silent, I entreat you, Mr. Done," she said, hurriedly.

He laughed a defiant laugh, and took her hand in his, which was burning and throbbing with the rapid heat of his pulse.

"No, I *will* have my answer here and now, and never turn back till you give it; you have been a thorny Rose, and given me many wounds. I'll be paid for my heartache with sweet words, tender looks, and frank confessions of love, for, proud as you are, you do love me, and dare not deny it."

Something in his tone terrified her; she snatched her hand away, and drew beyond his reach, trying to speak calmly, and to meet coldly the ardent glances of the eyes which were strangely darkened and dilated with uncontrollable emotion.

"You forgot yourself. I shall give no answer to an avowal made in such terms. Take me home instantly," she said in a tone of command.

"Confess you love me, Rose."

"Never!"

"Ah! I'll have a kinder answer, or——" Done half rose and put out his hand to grasp and draw her to him, but the cry she uttered seemed to arrest him with a sort of shock. He dropped into his seat, passed his hands over his eyes, and shivered nervously, as he muttered in an altered tone: "I meant nothing; the moonlight; sit down, I'll control myself—upon my soul I will!"

"If you do not, I shall go overboard. Are you mad, sir?" cried Rose, trembling with indignation.

"Then, I shall follow you, for I *am* mad, Rose, with love,—hasheesh!"

His voice sank to a whisper, but the last words thrilled along her nerves, as no sound of fear had ever done before. An instant she regarded him with a look which took in every sign of unnatural excitement, then she clasped her hands with an imploring gesture, saying, in a tone of despair:

"Why did I come; How will it end? Oh, Mark, take me home before it is too late!"

"Hush! Be calm; don't thwart me, or I may get wild again. My thoughts are not clear, but I understand you. There, take my knife, and if I forget myself, kill me. Don't go overboard; you are too beautiful to die, and wake from it as tranquil as if they had not a nerve in their bodies."

He threw her the slender hunting-knife he wore, looked at her a moment with a far-off look, and trimmed the sail like one moving in a dream. Rose took the weapon, wrapped her cloak closely about her, and, crouching as far away as possible, kept her eye on him, with a face in which watchful terror contended with some secret trouble and bewilderment more powerful than her face.

The boat moved round, and began to beat up against wind and tide; spray flew from her bow, the sail bent and strained in the gusts that struck it with perilous fitfulness. The moon was nearly hidden by scudding clouds, and one-half the sky was black with the gathering storm. Rose looked from threatening heavens to treacherous sea, and tried to be ready for any danger, but her calm had been sadly broken, and she could not recover it. Done sat motionless, uttering no word of encouragement, though the frequent flaws almost tore the rope from his hand, and the water often dashed over him.

"Are we in any danger?" asked Rose, at last, unable to bear the silence, for he looked like a ghostly helmsman, seen by the fitful night, pale now, wild-eyed, and speechless.

"Yes, great danger."

"I thought you were a skillful boatman."

"I am when I am myself; now I am foolishly losing the control of my will, and the strange quiet is coming over me. If I had been alone I should have given up sooner, but for your sake I kept on."

"Can't you work the boat?" asked Rose, terror-struck by the changed tone of his voice, the slow, uncertain movements of his hands.

"No; I see everything through a thick cloud; your voice sounds far away, and my desire is to lay my head down and sleep."

"Let me steer—I can, I must!" she cried, springing toward him, and lying her hand on the rudder.

He smiled, and kissed the little hand, saying, dreamily:

"You could not hold it a minute; sit by me, love; let us turn the boat again, and drift away together—anywhere, anywhere out of the world."

"Oh, Heaven, what will become of us!" and Rose wrung her hands in real despair. "Mr. Done—Mark—dear Mark, rouse yourself and listen to me. Turn, as you say, for it is certain death to go on so. Turn, and let us drift to the lighthouse; they will hear and help us. Quick, take down the sail, get out the oars, and let us try to reach there before the storm breaks."

As Rose spoke, he obeyed her like a dumb animal; love for her was stronger even than the instinct of self-preservation, and for her sake he fought against the treacherous lethargy which was swiftly overpowering him. The sail was lowered, the boat brought round, and, with little help from the ill-pulled oars, it drifted rapidly out to sea with the ebbing tide.

As she caught her breath after this dangerous manœuvre was accomplished, Rose asked, in a quiet tone, she vainly tried to render natural: "How much hasheesh did you take?"

All that Meredith threw me. Too much; but I was possessed to do it, so I hid the roll and tried it," he answered, peering at her with a weird laugh.

"Let us talk; our safety lies in keeping awake, and I dare not let you sleep," continued Rose, dashing water on her own hot forehead with a sort of desperation.

"Say on; one; that would wake me up from my last sleep, I think. I have hoped and feared, waited and suffered so long. Be pitiful, and answer, Rose."

"I do; but I should not own it now."

So low was the soft reply, he scarcely heard it, but he felt it, and made a strong effort to break from the baneful spell that bound him. Leaning forward, he tried to read her face in a ray of moonlight breaking through the clouds; he saw a new and tender warmth in it, for all the pride was gone, and no fear marred the eloquence of those soft, Southern eyes.

"Kiss me, Rose, then I shall believe it. I feel lost in a dream, and you, so changed, so kind, may be but a fair phantom. Kiss me, love, and make it real."

As if swayed by a power more potent than her will, Rose bent to meet his lips. But the ardent pressure seemed to startle her from a momentary oblivion of everything but love. She covered up her face, and sank down, as if overwhelmed with shame, sobbing through her passionate tears.

"Ah, what am I doing? I am mad, for I, too, have taken hasheesh," she exclaimed vehemently.

What he answered she never heard, for a rattling peal of thunder drowned his voice, and then the storm broke loose. Rain fell in torrents, the wind blew fiercely, sky and sea were black as ink, and the boat tossed from wave to wave almost at their mercy.

Giving herself up for lost Rose crept to her lover's side and clung there, conscious only that they would bide together through the perils their own folly brought them. Done's excitement was quite gone now; he sat like a statue, shielding the frail creature whom he loved, with a pale on his face, which looked awfully motionless when the lightning gave her glimpses of its white immobility.

Drenched, exhausted, and half senseless with danger, fear, and exposure, Rose saw at last a welcome glimmer through the gloom, and roused herself to cry for help.

"Mark, wake and help me! Shout, for God's sake—shout and call them, for we are lost if we drift by!" she cried, lifting his head from his breast, and forcing him to see the brilliant beacons streaming far across the troubled waters.

He understood her, aad, springing up, uttered shout after shout, like one demented. Fortunately, the storm had lulled a little, the lighthouse was heard and answered. Rose seized the helm, Done the oars, and, with one frantic effort, guided the boat into quieter waters, where it was met by the keeper, who towed it to the rocky nook which served as a harbor.

The moment a strong, steady face met her eyes, and a gruff, cheery voice hailed her, Rose gave way, and was carried up to the house, looking more like a beautiful drowned Ophelia than a living woman.

"Here, Sally, see to the poor thing; she's had a rough time on't. I'll take care of her sweetheart—and a nice job I've have, I reckon, rising wind, or the silence which covered their solitude. Rose moved once or twice, and lifted her hand as if to speak, but sank back mutely, and the hand fell again, as if it had not energy enough to enforce her wish. A cloud sweeping over the moon, a distant growl of thunder, and the slight gust that struck the sail seemed to rouse her. Done was singing now like one inspired, his hat at his feet, hair in disorder, and a strangely rapturous expression in his eyes, which were fixed on her. She started, shivered, and seemed to recover herself with an effort.

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"Oh, Heaven, what will become of us!" and Rose wrung her hands in real despair. "Mr. Done—Mark—dear Mark, rouse yourself and listen to me. Turn, as you say, for it is certain death to go on so. Turn, and let us drift to the lighthouse; they will hear and help us. Quick, take down the sail, get out the oars, and let us try to reach there before the storm breaks."

As Rose spoke, he obeyed her like a dumb animal; love for her was stronger even than the instinct of self-preservation, and for her sake he fought against the treacherous lethargy which was swiftly overpowering him. The sail was lowered, the boat brought round, and, with little help from the ill-pulled oars, it drifted rapidly out to sea with the ebbing tide.

As she caught her breath after this dangerous manœuvre was accomplished, Rose asked, in a quiet tone, she vainly tried to render natural: "How much hasheesh did you take?"

"All that Meredith threw me. Too much; but I was possessed to do it, so I hid the roll and tried it," he answered, peering at her with a weird laugh.

"Let us talk; our safety lies in keeping awake, and I dare not let you sleep," continued Rose, dashing water on her own hot forehead with a sort of desperation.

"Say on; one; that would wake me up from my last sleep, I think. I have hoped and feared, waited and suffered so long. Be pitiful, and answer, Rose."

"I do; but I should not own it now."

So low was the soft reply, he scarcely heard it, but he felt it, and made a strong effort to break from the baneful spell that bound him. Leaning forward, he tried to read her face in a ray of moonlight breaking through the clouds; he saw a new and tender warmth in it, for all the pride was gone, and no fear marred the eloquence of those soft, Southern eyes.

"Kiss me, Rose, then I shall believe it. I feel lost in a dream, and you, so changed, so kind, may be but a fair phantom. Kiss me, love, and make it real."

As if swayed by a power more potent than her will, Rose bent to meet his lips. But the ardent pressure seemed to startle her from a momentary oblivion of everything but love. She covered up her face, and sank down, as if overwhelmed with shame, sobbing through her passionate tears.

"Ah, what am I doing? I am mad, for I, too, have taken hasheesh," she exclaimed vehemently.

What he answered she never heard, for a rattling peal of thunder drowned his voice, and then the storm broke loose. Rain fell in torrents, the wind blew fiercely, sky and sea were black as ink, and the boat tossed from wave to wave almost at their mercy.

Giving herself up for lost Rose crept to her lover's side and clung there, conscious only that they would bide together through the perils their own folly brought them. Done's excitement was quite gone now; he sat like a statue, shielding the frail creature whom he loved, with a pale on his face, which looked awfully motionless when the lightning gave her glimpses of its white immobility.

Drenched, exhausted, and half senseless with danger, fear, and exposure, Rose saw at last a welcome glimmer through the gloom, and roused herself to cry for help.

"Mark, wake and help me! Shout, for God's sake—shout and call them, for we are lost if we drift by!" she cried, lifting his head from his breast, and forcing him to see the brilliant beacons streaming far across the troubled waters.

He understood her, aad, springing up, uttered shout after shout, like one demented. Fortunately, the storm had lulled a little, the lighthouse was heard and answered. Rose seized the helm, Done the oars, and, with one frantic effort, guided the boat into quieter waters, where it was met by the keeper, who towed it to the rocky nook which served as a harbor.

The moment a strong, steady face met her eyes, and a gruff, cheery voice hailed her, Rose gave way, and was carried up to the house, looking more like a beautiful drowned Ophelia than a living woman.

"Here, Sally, see to the poor thing; she's had a rough time on't. I'll take care of her sweetheart—and a nice job I'll have, I reckon, rising wind, or the silence which covered their solitude. Rose moved once or twice, and lifted her hand as if to speak, but sank back mutely, and the hand fell again, as if it had not energy enough to enforce her wish. A cloud sweeping over the moon, a distant growl of thunder, and the slight gust that struck the sail seemed to rouse her. Done was singing now like one inspired, his hat at his feet, hair in disorder, and a strangely rapturous expression in his eyes, which were fixed on her. She started, shivered, and seemed to recover herself with an effort.

"Where are they?" she asked, looking vainly for the island heights and the other boat.

"They have gone to the beach, I fancy, but we will follow." As Done leaned forward to speak, she saw his face, and shrank back with a sudden flush, for in it she read clearly what she had felt, yet doubted until now. He saw the tell tale blush and gesture, and said impetuously: "You know it now; you cannot deceive me longer, nor daunt me with your pride! Rose, I love you, and dare tell you so to-night!"

"Not now—not here—I will not listen. Turn back, and be silent, I entreat you, Mr. Done," she said, hurriedly.

He laughed a defiant laugh, and took her hand in his, which was burning and throbbing with the rapid heat of his pulse.

"No, I *will* have my answer here and now, and never turn back till you give it; you have been a thorny Rose, and given me many wounds. I'll be paid for my heartache with sweet words, tender looks, and frank confessions of love, for, proud as you are, you do love me, and dare not deny it."

Something in his tone terrified her; she snatched her hand away, and drew beyond his reach, trying to speak calmly, and to meet coldly the ardent glances of the eyes which were strangely darkened and dilated with uncontrollable emotion.

"You forgot yourself. I shall give no answer to an avowal made in such terms. Take me home instantly," she said in a tone of command.

"Confess you love me, Rose."

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"Ah! I'll have a kinder answer, or——" Done half rose and put out his hand to grasp and draw her to him, but the cry she uttered seemed to arrest him with a sort of shock. He dropped into his seat, passed his hands over his eyes, and shivered nervously, as he muttered in an altered tone: "I meant nothing; the moonlight; sit down, I'll control myself—upon my soul I will!"

"If you do not, I shall go overboard. Are you mad, sir?" cried Rose, trembling with indignation.

"Then, I shall follow you, for I *am* mad, Rose, with love,—hasheesh!"

His voice sank to a whisper, but the last words thrilled along her nerves, as no sound of fear had ever done before. An instant she regarded him with a look which took in every sign of unnatural excitement, then she clasped her hands with an imploring gesture, saying, in a tone of despair:

"Why did I come; How will it end? Oh, Mark, take me home before it is too late!"

"Hush! Be calm; don't thwart me, or I may get wild again. My thoughts are not clear, but I understand you. There, take my knife, and if I forget myself, kill me. Don't go overboard; you are too beautiful to die, and wake from it as tranquil as if they had not a nerve in their bodies."

He threw her the slender hunting-knife he wore, looked at her a moment with a far-off look, and trimmed the sail like one moving in a dream. Rose took the weapon, wrapped her cloak closely about her, and, crouching as far away as possible, kept her eye on him, with a face in which watchful terror contended with some secret trouble and bewilderment more powerful than her face.

The boat moved round, and began to beat up against wind and tide; spray flew from her bow, the sail bent and strained in the gusts that struck it with perilous fitfulness. The moon was nearly hidden by scudding clouds, and one-half the sky was black with the gathering storm. Rose looked from threatening heavens to treacherous sea, and tried to be ready for any danger, but her calm had been sadly broken, and she could not recover it. Done sat motionless, uttering no word of encouragement, though the frequent flaws almost tore the rope from his hand, and the water often dashed over him.

"Are we in any danger?" asked Rose, at last, unable to bear the silence, for he looked like a ghostly helmsman, seen by the fitful night, pale now, wild-eyed, and speechless.

"Yes, great danger."

"I thought you were a skillful boatman."

"I am when I am myself; now I am foolishly losing the control of my will, and the strange quiet is coming over me. If I had been alone I should have given up sooner, but for your sake I kept on."

"Can't you work the boat?" asked Rose, terror-struck by the changed tone of his voice, the slow, uncertain movements of his hands.

"No; I see everything through a thick cloud; your voice sounds far away, and my desire is to lay my head down and sleep."

"Let me steer—I can, I must!" she cried, springing toward him, and lying her hand on the rudder.

He smiled, and kissed the little hand, saying, dreamily:

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